

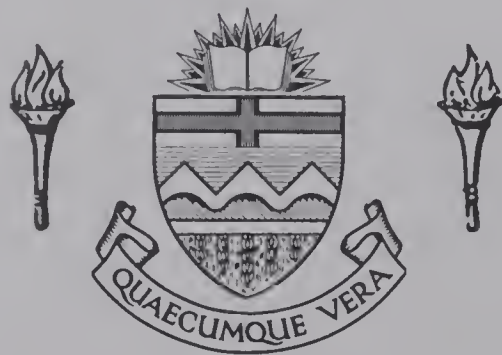
For Reference

NOT TO BE TAKEN FROM THIS ROOM

For Reference

NOT TO BE TAKEN FROM THIS ROOM

EX LIBRIS UNIVERSITATIS ALBERTAENSIS



THE UNIVERSITY OF ALBERTA

GAMES AND PHYSICAL ACTIVITIES OF THE ANCIENT
POLYNESIANS AND RELATIONSHIPS TO CULTURE

by



KEVIN GEORGE JONES

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF ARTS

FACULTY OF PHYSICAL EDUCATION

EDMONTON, ALBERTA

AUGUST, 1967

THE UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "Games and Physical Activities of the Ancient Polynesians and Relationships to Culture," submitted by Kevin George Jones in partial fulfillment of the requirements for the degree of Master of Arts.

ABSTRACT

The purpose of this study was to collect and tabulate the games and physical activities of the ancient Polynesians so that relationships between the aspects of their culture and these games could be studied.

For this purpose a classification system was devised whereby culture was divided into six categories, namely: political, economic, family, ceremonial, socialization and social psychological. The games and physical activities were divided into eight characteristics, namely: pursuit, chance, strategy, dexterity, enigma, vertigo, imitation and exultation. From these two systems, each of the seventy-six games and their variations, were classified into a horizontal component of culture and a vertical characteristic of games.

Data was tabulated concerning these seventy-six games and their variations within ten island groups of Polynesia namely: Hawaii, Tahiti, New Zealand, Fiji, Samoa, Niue, Tonga, Rotuma, Society and Marquesas. From this data two tables were drawn showing the cross-classification of aspects of culture and characteristics of games, and the geographical distribution of games and physical activities throughout Polynesia.

A high incidence of games and physical activities was found under the classification of dexterity and social psychological. This category seems to exemplify the Polynesians way of life with respect to his play or leisure time pursuits. The dominance of social psychological activities indicated the need for close, reciprocal

relationships so that life could continue in their communal type society. Similarly, the great number of activities of a dexterity nature indicates the type of technology these people indulged in, where the hand and the foot provided two of the chief sources of power. It appears, then, that games classified as social psychological and dexterity were not only the most numerous in their culture, but were the most beneficial in the aid to survival for these peoples.

The incidence of recorded games in the various groups studied were: Hawaii - 71, New Zealand - 36, Samoa - 32, Fiji - 31, Tahiti - 29, Tonga - 11, Niue - 10, Rotuma - 10, Society - 10 and Marquesas - 7. From this evidence, it would appear, that more recorded information concerning the ancient games and physical activities, was available from the larger, more populated, and earlier settled island groups.

ACKNOWLEDGEMENTS

The author would like to express his sincere gratitude to his thesis committee members, Professor R.G. Glassford, Dr. C.S. Brant, and particularly my Chairman, Dr. M.L. Howell, whose assistance and many hours of guidance in preparing this thesis was greatly appreciated.

Thanks are extended to the Faculty of Physical Education without whose financial assistance this thesis would not have been accomplished in its present form. Also sincere thanks to Mr. E.H. Bryan Jr. Curator of the B.P. Bishop Museum in Honolulu for his assistance with data and photographs.

The author must record his gratitude and appreciation to his wife, Kay, for her assistance in typing, proof reading, and management of its various aspects, without whose help this reality would have been a mere dream.

TABLE OF CONTENTS

CHAPTER		PAGE
I.	STATEMENT OF THE PROBLEM. . . . .	.1
	Purpose and Significance. . . . .	.1
	The Problem . . . . .	.2
	Sub-Problems. . . . .	.3
	Classification . . . . .	.4
	Definition of Terms. . . . .	.6
	Limitations. . . . .	.7
	Delimitations . . . . .	.8
	Methods and Procedures . . . . .	.9
II.	DESCRIPTION AND DISTRIBUTION OF GAMES AND PHYSICAL ACTIVITIES..	10
	Introduction . . . . .	.10
	A. ACTIVITIES AND GAMES WITH PURSUIT CHARACTERISTICS . . . . .	.10
	Foot Racing, Burden Racing, Wheelbarrow Racing, Swimming Races, Canoe Races, Eye Pointing, Hop Scotch, Tag, Blind-Man's Bluff, Prisoner's Base and Hide and Seek.	
	B. ACTIVITIES AND GAMES WITH CHANCE CHARACTERISTICS . . . . .	.27
	Cock Fighting, Hand Betting, Stick Drawing and Pig guessing.	
	C. ACTIVITIES AND GAMES WITH STRATEGY CHARACTERISTICS.	31
	Boxing, Fencing, Wrestling, Tug-of-War, Finger Pulling Coconut Shell Casting, Ball Games, Checkers, Draughts, Hand Betting, Hide and Seek.	
	D. ACTIVITIES AND GAMES WITH DEXTERITY CHARACTERISTICS	58
	Rope Jumping, Head Standing, See-Saw, Long Breath Holding, Sledge Sliding, Stilts, Hand Rubbing, Tops, Cup and Ball Games, Throwing a Pointed Object, Pit Shooting, Seed Shooting, Juggling, Jackstones or Knucklebones, Mice Shooting or Bow and Arrow, Spear Dodging, Arrow and Spear Throwing, Dart-Game,	

CHAPTER

PAGE

Bowling Disks, Pitching Disks, Ring Casting, Hide the Stone, Find the Stone, Stone Hiding, Leaping into the Sea, Athletic Events, Bandy, The Hoop, Catapult and Slingshot, Children's games - Minor, Boxing, Fencing, Wrestling, Tug-of-War, Finger Pulling, Wheelbarrow Racing, Canoe Racing, Coconut-Shell Casting, Ball Games, Hop Scotch, Tag, Blind-Man's Bluff and Prisoner's Base.

E. GAMES AND PHYSICAL ACTIVITIES WITH ENIGMA CHARACTERISTICS.....137

Cat's Cradle or String Figures, String Tricks, Stone Dice, Hand Clapping, Fiddlesticks, Riddles and Word Play, Cup and Ball Games, Juggling, Jackstones, Marbles, Stone Hiding, Hide the Stone and Find the Stone.

F. GAMES AND PHYSICAL ACTIVITIES WITH VERTIGO CHARACTERISTICS....153

Swinging, Surfboards, See-Saw, Stilts and Leaping into the Sea.

G. GAMES AND PHYSICAL ACTIVITIES WITH IMITATION CHARACTERISTICS..164

Sham fights, Jumping Jacks or Puppets, Horse Riding, Kites, Wind or Pin Wheel, Dolls, Leaf Canoes.

H. GAMES AND PHYSICAL ACTIVITIES WITH EXULTATION CHARACTERISTICS.178

Firebrand Gliding, Bullroarer, Dragon Fly Catching, Prop Open the Eyes with Sticks, Adult Games of Attraction - Ume and Kilu, Long Breath Holding, Sledge Sliding, Hand Clapping, Eye Pointing, Hand Rubbing, Cock Fighting, Mice Shooting or Bow and Arrow, Pin or Wind Wheel, Tops, Kites, Pit Shooting, Bandy, Jumping Jacks and Fiddlesticks.

III. INTERPRETATION OF THE DATA 186

A. Introduction 186

B. Aspects of Culture Classification 186

C. Characteristics of Games Classification 192

D. Distribution of Games 197

CHAPTER

PAGE

IV. SUMMARY AND CONCLUSIONS.	203
--------------------------------------	-----

Recommendations	206
---------------------------	-----

BIBLIOGRAPHY	208
------------------------	-----

APPENDIX A .

Map of the Political Control of the Islands of Polynesia .	222
--	-----

APPENDIX B .

List of the Illustrations and their Sources	223
---	-----

LIST OF ILLUSTRATIONS

FIGURE		PAGE
1.	Polynesian canoes, a, double canoe from Tonga; b, outrigger canoe from Cook Islands.....	22
2.	Maori canoes. a, river canoe; b, sea-going canoe.....	22
3.	Diagram of Hawaiian Hop-scotch pitch.....	23
4.	A typical bird used in cock-fighting contests.....	34
5.	Boxing match before Captain Cook at Hawaii in 1770.....	34
6.	Variation of Wrestling - Hand Wrestling.....	44
7.	Variation of Wrestling - Hand Wrestling.....	44
8.	Hawaiian children playing Tug-of-War.....	49
9.	Konane or checkers board cut into the rock at Kona, Hawaii.....	49
10.	Drawing of a variation of a Checkers board used in Hawaii.....	53
11.	A Maori variation of checkers called putahi.....	54
12.	Wooden table and "men" that the game of checkers was used for in Hawaii.....	55
13.	Drawing of a checkers board.....	55
14.	Board used for checkers.....	55
15.	Diagram used in game of Draughts.....	57
16.	Holua slide at Pun Hinahina, South Kona. Start of the Speedway.....	61
17.	Palm leaf used as a children's sled.....	61
18.	Ancient holua sled in Bishop Museum.....	68
19.	Drawing of Holua sled.....	68
20.	Variation of Holua sled-toboggan.....	68
21.	Marquesas Islands stilts (on the left.).....	73

FIGURE

PAGE

22.	Maori Stilts.....	73
23.	Maori Stilts.....	73
24.	Maori Humming Top.....	79
25.	Maori Tops.....	79
26.	Maori whip top.....	79
27.	Cup and Ball Game.....	84
28.	Loop and Ball Game.....	84
29.	Hawaiian girl juggling oranges.....	84
30.	Man from Nitendi, shooting the bow and arrow.....	95
31.	Hawaiian bow and arrow.....	95
32.	Spear throwing and the target in Tuamatu.....	97
33.	Close up of the target.....	97
34.	Throwing javelins (spears) at a coconut high on a pole.....	102
35.	Fijian Tinga or spear throwing.....	102
36.	Types of darts used in Polynesia.....	110
37.	The Samoan stick or dart thrower.....	110
38.	Bowling stone from Little Papanui.....	112
39.	Bowling stone from Hawaii.....	112
40.	Bowling stones used in Hawaii as a test of strength weigh 84 and 89 lbs.....	114
41.	Bowling stone from Vaitupu.....	114
42.	Hawaiian bowling stone.....	117
43.	Bowling stones and pitching stones from Hawaii.....	117
44.	Pitching discs from Samoa.....	120
45.	Hawaiian pitching disc.....	120

FIGURE

PAGE

46.	Samoan natives playing shuffle-board or pitching discs.....	120
47.	Native climbing a coconut tree almost as easy as walking on the ground.....	131
48.	Native using a sling.....	131
49.	Children playing cat's cradle.....	136
50.	Children playing cat's cradle.....	136
51.	Hawaiian string figure of "one eye" or <u>nenu</u> made on Oahu.....	139
52.	Hawaiian cat's cradle figures.....	142
53.	Hawaiian cat's cradle figures.....	142(a)
54.	Hawaiian cat's cradle figures.....	142(b)
55.	Making string figures, Easter Island.....	147
56.	Maori cat's cradle figure.....	147
57.	Hawaiian wood puzzles.....	152
58.	Hawaiian stone dice.....	152
59.	Tahitian swing.....	152
60.	Maori "giant stride" swing.....	156
61.	Maori "giant stride" swing.....	156
62.	Hawaiian surf-board riding.....	158
63.	Ancient sketch of surf-riding in Hawaii.....	158
64.	An old surfboard in the Bishop Museum.....	162
65.	Hawaiian surf board.....	162
66.	Jumping Jack.....	167
67.	Maori puppet or jumping jack.....	167
68.	Kite flying in Society Islands, tail is 28 feet long...	169
69.	A Maori Kite.....	169

FIGURE

PAGE

70.	A Maori kite, Bay of Plenty.....	171
71.	A Maori kite, Bay of Islands.....	171
72.	A Maori kite.....	171
73.	Hawaiian kites.....	174
74.	Hawaiian pin wheel.....	176
75.	Hawaiian paper bird.....	176
76.	Hawaiian puppets or dolls.....	176
77.	Hawaiian leaf canoes.....	180
78.	Maori bull-roarer and whizzer.....	180
79.	Ume wand.....	180
80.	Map showing Political distribution of Pacific Islands..	222

LIST OF TABLES

TABLE		PAGE
I.	TABLE OF GAME CLASSIFICATIONS.....	188
II.	TABLE OF GAME DISTRIBUTION	199-200

CHAPTER I

STATEMENT OF THE PROBLEM

Purpose and Significance

The purpose of this study is the compilation, classification and analysis of games and physical activities of certain Polynesian Island groups, and their significance to the culture of these people.

The study is significant in that it will assist in filling a gap in such knowledge within the discipline of physical education. Any vision into the future should be based on an understanding and intelligent interpretation of the past. van Dalen, Mitchell and Bennett support this and add:

No one can comprehend contemporary physical education who has no concept of the social forces, conditions, and movements, the play of ideas and the philosophies, that have come out of the past to shape the institutions of the present day. History brings distant times and conditions into focus to help us evaluate our modern heritage. Similarly, it helps illuminate and identify approaching guide posts.¹

This reconstruction of the past has been carried out for many of the early societies, particularly the Greek, Roman and Egyptian. But this is not the case for many of the primitive peoples, and any data which is available is orientated towards disciplines such as anthropology and sociology rather than physical education.

¹D.B. van Dalen, E.D. Mitchell and B.L. Bennett, A World History of Physical Education (Englewood Cliffs, New Jersey, U.S.A. Prentice-Hall Inc., 1961). p.1.

On this problem Henry states:

Even though anthropologists have been aware of the role of physical games and sports in all cultures one cannot find any comprehensive treatment of the topic in anthropology text books.

It would be unfair to say that scholars in various fields such as those mentioned above feel that it is unimportant to study man as an individual engaged in physical activity. Rather, the neglect is because this aspect is of peripheral rather than of central interest to the scholar in that field.²

This observation by Henry holds true for Polynesia. Data is available concerning games and physical activities of these early people, but it is not orientated towards physical education. This will require that a thorough analysis of available data be made, so that the more meaningful information (for physical educationists), is available.

The need for this research is stated by Henry, "as each of the traditional fields of knowledge concerning man becomes more specialized, complex and detailed, it becomes more differentiated from physical education."³ Thus physical education must now view these related disciplines with a central view of its own rather than accepting a peripheral position relegated by another discipline.

The Problem

As stated, the main problem will be the collection, compilation, classification and analysis of these activities. The data will concern only games and activities which were practiced before the coming of

²Franklin M. Henry, "Physical Education - An Academic Discipline", JOHPER (Vol.35, September, 1964), p.69.

³Ibid.

white men to these islands. Any material which can be proved to have been influenced by a later European culture will be deleted.

This restriction to the study imposes a difficulty in that most, if not all activities were discontinued within twenty years of European contact. The only surviving activities, although drastically changed, are the hula dance and surf-board riding. Mitchell lists the arguments for the replacement of their games by the more traditional British games and physical activities as:

1. The Polynesian people were so intensely interested in the new culture of the foreigners that they neglected their games in order to earn money to purchase introduced articles.
2. Introduced sports and pastimes were accepted and replaced most of the native games.
3. The chiefs no longer maintained their "courts" where young men played games for the entertainment of their elders and as training for warfare.
4. The betting (this does not apply to all islands) that accompanied the old games met with the intense disfavor of the missionaries. Thus the games were discouraged.⁴

Sub-Problems

The primary sub-problems in this study are:

1. To develop a classification scheme of the characteristics of games in a primitive culture, and to categorize these games according to the various aspects of the primitive culture.
2. To investigate the apparent relationships between types of activities and aspects of culture.

⁴Donald D. Mitchell, "Hawaiian Games & Pastimes" (Unit 13 of unpublished book, Honolulu, Hawaii, 1967), pp. 1-2.

Classification

The following system of classification was developed with Salter⁵ to be used as a model for future work in this area. In its preparation many existing classifications were studied, including those given by Caillouis⁶, Roberts, Arth and Bush⁷, and Sutton-Smith⁸. These were all found to be unsuitable for various reasons and the following classification constructed.

Culture, in this classification has been divided into six categories, in order that all aspects of the culture can be included. These components are:

1. Political
2. Economic
3. Family (or Domestic)
4. Ceremonial
5. Socialization (or Cultural Identification)
6. Social-Psychological (or Social Interaction)

Games and physical activities were then divided into eight types and all characteristics can be included within these categories.

⁵Michael A. Salter, and Kevin G. Jones "Classification of aspects of Culture and Game Characteristics." unpublished graduate material. (Edmonton: The University of Alberta, Faculty of Physical Education, 1967).

⁶Roger Caillouis, Man, Play and Games (Glencoe Illinois: The Free Press, 1961).

⁷John M. Roberts, Malcolm Arth, and Robert R. Bush, "Games in Culture", American Anthropologist. (August 1959, 61: 597-605).

⁸Brian Sutton-Smith, The Games of New Zealand Children (Berkeley: University of California Press, 1959).

1. Pursuit
2. Chance
3. Strategy
4. Dexterity
5. Enigma
6. Vertigo
7. Imitation
8. Exultation

A table of games and activities will be listed as follows:

	ASPECTS OF CULTURE					
TYPES OF ACTIVITIES:	POLITICAL	ECONOMIC	FAMILY	CEREMONIAL	SOCIALIZATION	SOCIAL-PSYCHOLOGICAL
PURSUIT						
CHANCE						
STRATEGY						
DEXTERITY						
ENIGMA						
VERTIGO						
IMITATION						
EXULTATION						

All games and physical activities, therefore, will be classified horizontally into that aspect of culture they best fit and vertically as to that characteristic of activity they best represent. In those cases in which it is difficult to utilize a single category two or more categories may be signified.

Definition of Terms

(a) Horizontal Classification

Political: activities pertaining to the theory, art and practice of government at any level of society.

Economic: activities pertaining to production, consumption and exchange within the society.

Family (Domestic): activities pertaining to the aspects of home and family life within the society.

Ceremonial: activities pertaining to a fixed and/or sanctioned pattern of behavior which surrounds various phases of life serving such ends as religious or aesthetic.

Socialization (Cultural Identification): activities pertaining to the institutional process whereby the accumulated ideas, standards, knowledge, and techniques of a society are transferred to, or imposed upon, the rising generation.

Social Psychological (Social Interaction): activities pertaining to the reciprocal relations of interacting human beings either between individuals or groups.

(b) Vertical Classification

Pursuit: activities involving the elements of chase with a view to reaching, accomplishing or obtaining.

Chance: activities involving the mode of occurrence of phenomena uncontrolled by human capacity or purpose.

Strategy: activities involving the art of devising and employing plans towards a goal.

Dexterity: activities involving elements of physical skill.

Enigma: activities involving elements of mental skill outside the realm of strategy.

Vertigo: activities involving loss of body stability and/or equilibrium.

Imitation: activities involving elements of mimicry.

Exultation: activities involving jubilation and/or excitement.

Other definitions of terms used in this thesis are:

Society: a functioning group of people co-operating in pursuit of their major interests including self-maintenance and self-perpetuation.

Culture: a collective name for all behavior patterns socially acquired and transmitted. It is the sum total of these plus all of the present artifacts within a closed system.

Games: play-acting in which there are participants who compete with each other in accordance with rules.

Physical Activities: amusements, pastimes or simple activities which do not necessarily require rules for participation.

Limitations

The Greek translation of Polynesia is "many islands". Polynesia consists of islands numbering in the thousands, though it has only a total land area of approximately ten thousand square miles. These islands are spread over an area almost equal to that of the North American Continent. Many of the Polynesian Islands are only coral atolls and lack the necessary resources to support life of any kind.

There are very few islands, in comparison to the total, which are capable of sustaining a large group of people for any length of time.

Some of the obvious limitations are:

1. The great number of islands and their vast geographical spread over the Pacific Ocean;
2. All the islands are not governed by any central group or nation. U.S.A., Britain, France, Chile and New Zealand all share in this responsibility. This means that at least five different nations have to be approached for information;
3. The above factor introduces a language problem when corresponding with French or Chilean island groups;
4. There is a lack of reliable primary sources and most of those obtained are from early missionaries with a few from government officials and sea captains. The question of bias must not be overlooked when using some of this data, since some of these early authors had very fixed ideas as to the nature of games and physical activities practiced by the Polynesians; and
5. The early Polynesians were non-literate and as such left no recorded information. Thus early researchers had, in most cases, to rely on the memories of their informants.

Delimitations

1. The cost and time involved in obtaining data by correspondence with island administrators, historical organizations, museums, etc., has to be considered.
2. The dance or dancing activities will not be included in this study as this would be a thesis area in its own right.

Methods and Procedures

The study will be essentially an investigation of primary and secondary sources. The primary sources are principally from journals and books, in the main written in the late eighteenth or nineteenth centuries. Secondary sources are generally publications of a more recent nature supplemented by personal correspondence with curators of museums and historical institutions.

For clarity and continuity of the classification of games and physical activity in Chapter 2, the following abbreviations will be used for the horizontal aspects of culture and the vertical characteristics of play.

Aspects of Culture.

Political	-	P
Economic	-	E
Family	-	F
Ceremonial	-	C
Socialization	-	S
Social Psychological	-	SP

Types of Activities.

Pursuit	-	p
Chance	-	c
Strategy	-	s
Dexterity	-	d
Enigma	-	e
Vertigo	-	v
Imitation	-	i
Exultation	-	ex

CHAPTER II

DESCRIPTION AND DISTRIBUTION OF GAMES AND PHYSICAL ACTIVITIES

Introduction

The games and physical activities of the Polynesians were both many and varied. Due to the nature of Polynesia, these games, as they evolved or diffused, produced many variations. These variations were cited where possible, and their distribution throughout Polynesia was given.

The eight characteristics of games and physical activities are used as divisions for the placement of appropriate data. In cases where a game or activity has two or more primary characteristics then it will be listed, but not described, in the other divisions. In all cases the secondary characteristics will be included but designated as being secondary by the use of an asterisk.

A. ACTIVITIES AND GAMES WITH PURSUIT CHARACTERISTICS

1. Foot Racing or Kukini. Classification.P:s,d,c*.

This was described by Malo¹ as being "a very popular Hawaiian amusement" but was "often associated with betting." Malo described such a race:

The runners took their station at the starting point and a pole with a flag was planted at the goal. The race might be over a long course or a short one; that was as the runners agreed.

¹David Malo, Hawaiian Antiquities, B.P. Bishop Museum, Special Publications No.2, (Honolulu: Bishop Museum Press, 1951), pp.219-20.

It was a rule of the game that if both runners reached the goal at the same instant, neither party won (aole no eo), it was a dead heat (pai wale). It was when one reached the goal ahead of the other that he was declared victor. In that case, the winners made great exultation over their victory.²

Bolton³ stated that foot races were a "common occurrence" and that "the king's messengers are said to have attained great speed, making the circuit of Hawaii, about three hundred miles over a very bad road, in eight or nine days." Ellis gave a good description of the preparations for a race and stated:

Faatitiaihe-mo raa, or foot race in which the young men of opposite parties engaged. Great preparation was made for this trial of strength and agility. The bodies of the runners were anointed with oil; the maro, or girdle, the only garment they wore, was bound tight around the loins. A wreath of flowers adorned the brows, and a light white or coloured bandage of native cloth was sometimes bound like a turban round the head. A smooth line of sandy beach was usually selected for the course. Sometimes they returned to the place from which they had started, but in general they ran the prescribed distance in a straight line.⁴

Fornander agreed with the description of this race which was run straight with no return and stated:

The winning goal is arranged beforehand (as for instance), from the harbor of Kou to the hill of Leahi in distance, that being the winning post. That is where the runners race, with four attendants, two on each side, who are called puhi.

When nearing the winning post, about fifty fathoms between it and the runners, that place is restricted to the runners only, they race till they reach the winning post.

²Ibid.

³H.C. Bolton, "Some Hawaiian Pastimes", Journal of American Folklore, Vol.4., No.12., 1890, p.21.

⁴William Ellis, South Sea Islands (London: Fisher, Son and Jackson, 1830), p.293.

If one grasps the bottom of the stake and the other the top, then it is even, and no race. But if the stake is reached by one and not by the other, it is won: then the crowd roars, properties go to one side, some being left destitute.⁵

Culin⁶ described foot racing or hei-hei-ku-ki-ni as "a dozen or more men will race for a prize," and gives the course as "usually one-half to three-quarters of a mile." Also that "they frequently amuse themselves with racing matches between the boys and girls, and here again they wager with great spirit."

Bryan⁷ stated that the "races were very popular," and were "run by both amateurs and professionals over both long and short courses. Professional runners (also called kukini) trained carefully and are said to have had remarkable speed and endurance." Handy⁸ gave descriptions of the sports which took place after the annual festivals held in honor of their Gods, and it appeared that foot races were always a part of these events. Alexander⁹ also gave further proof to its popularity.

⁵Abraham Fornander, "Fornander Collection of Hawaiian Antiquities and Folklore, 'Memoirs of the Bernice Pauahi Bishop Museum, Vol.VI. (Honolulu: Bishop Museum Press. 1919-1920), p.198.

⁶Stewart Culin, "Hawaiian Games," American Anthropologist, Vol.I., No.2., (April, 1899), pp.210-11.

⁷E.H. Bryan, Jr. Ancient Hawaiian Life (Honolulu: Bishop Museum Press, 1938 and 1950), p.48.

⁸E.S. Craighill Handy, "Polynesian Religion," B.P. Bishop Museum Bulletin 34 (Honolulu: Bishop Museum Press, 1927), p.306.

⁹W.D. Alexander, A Brief History of the Hawaiian People (Chicago: American Book Company, 1891), p.60 and p.89.

The Maoris were also fond of foot races and Buck described them as:

Running (oma) when competitive, was termed omaoma and the speedy runner grew up to be an asset to his tribe in chasing ceremonial challengers and in the running battles which often took place. Competitions over measured distances were not known but the young people at social gatherings fixed their distances according to flat land that was available. Long distance races between fixed points were sometimes arranged more as a test of stamina than of speed.¹⁰

Best¹¹ agreed with Buck on this final point and stated that "foot races over short distances we hear little of, but contests over long distances took place, and these called for endurance." He also described the technique used as "bent-knee jog-trot peculiar to bare-footed folk." Del Mar¹² said that "practice in running was often acquired by throwing small bundles of grass into a strong wind and following in pursuit of them."

Stumpf and Cozens¹³ gave mention of it as a leisure time activity.

The foot race, or "there" of the Fijians, seemed to be as stated by B. Thompson¹⁴: "was always run on some occasion such as the first voyage of a canoe, or the digging of a plantation, for a prize offered by the owner."

¹⁰Sir Peter Buck, The Coming of the Maori (Wellington: Whitcombe and Tombs Ltd., 1962), p.240.

¹¹Elsdon Best, The Maori As He Was (Wellington: R.E.Owen, Government Printer, 1952), p.140.

¹²F. Del Mar, A Year Among The Maoris, A Study of Their Arts and Customs (London: Ernest Benn Ltd., 1924), p.104.

¹³F. Stumpf, and F.W. Cozens, "Some Aspects of the Role of Games, Sports, and Recreational Activities in the Culture of Modern Primitive Peoples, The New Zealand Maoris," Research Quarterly (June 1947), Vol.18., p.211.

¹⁴Basil Thompson, The Fijians, A Study of the Decay of Customs (London: William Heinemann, 1908), p.328.

This point of view is also stated by Stumpf and Cozens¹⁵, while L.Thompson¹⁶ states that "children often amuse themselves by running races on the beach", and Williams and Calvert¹⁷ stated that many of the vacant hours are filled up by the Fijians in sports" of which foot racing was included.

As previously stated foot races appear to have been a very common activity throughout Polynesia and instances are quoted by Stair¹⁸ that it was a common sport in Samoa, while Loeb¹⁹ stated that "the people of Niue also organized running races as tests of superiority." Ellis²⁰ also described foot races as being a common activity of the Tahitians.

One aspect of foot races worthy of mention was the presence of gambling in Hawaii. There did not appear to be any reports of gambling in any other island group, except that in most, if not all, prizes were offered to the winners.

¹⁵F.Stumpf, and F.W. Cozens, "Some Aspects of the Role of Games, Sports, and Recreational Activities in the Culture of Modern Primitive Peoples, The Fijians," Research Quarterly (1949), Vol.20., p.12.

¹⁶Laura Thompson, Fijian Frontier (San Fransisco: American Council Institute of Pacific Relations, 1940), p.42.

¹⁷Thomas Williams, and James Calvert, Fiji and the Fijians (New York: D. Appleton and Company, 1859), p.127.

¹⁸Rev. John B. Stair, Old Samoa (Oxford: Horace Hart, Printer to the University, 1897.), p.136.

¹⁹Edwin M. Loeb, "History and Traditions of Nieu," B.P. Bishop Museum, Bulletin 32 (Honolulu: Bishop Museum Press, 1926), p.118.

²⁰Ellis, loc.cit.

2. Burden Racing or Hei-hei-haa-we.
Classification.S,E:p.

This was described by Culin²¹ as "a contest in which each of the participants carries another astride his neck." This was obviously a description of the traditional children's game of pig-a-back, where the emphasis was on endurance rather than speed. This activity was only reported from Hawaii but because of its simplicity was probably universally practiced.

Other variations in Hawaii mentioned by Culin²² are "Hei-hei-e-ke, or sack racing in which eight men usually race, starting from a line, running to a goal and back to the line"; and "le-le-wa-wae-ka-hi, or one foot jumping or hopping in which contestants tie one leg and run races, hopping on one foot."

3. Wheelbarrow Racing or Hei-hei-hu-i-la-ba-la-la.
Classification.SP:p,d.

This Culin²³ described as being similar to the European game, and suggested that its authenticity as being pre-European is questionable as it appeared only in Hawaii.

4. Swimming Races.
Classification.E,SP:p,d.

The Hawaiian people utilized the sea, streams and pools near waterfalls for aquatic sports. Swimming was popular with adults and children of both sexes. Ellis described it as:

One of their most favourite sports, is the faahee, or swimming in the surf, when the waves are high, and the billows break in foam and spray among the reefs. Individuals of all ranks and ages, and both sexes, follow this pastime with the greatest avidity.

²¹Culin, op.cit., p.211.

²²Ibid.

²³Ibid.

They usually selected the openings in the reefs, or entrances to some of the bays, for their sport; where the long heavy billows of the ocean rolled in unbroken majesty upon the reef or the shore.²⁴

Buck²⁵ stated that the "Polynesians have shown their mastery of the waves (nalu) by riding them no matter how high or how rough. Body surfing without boards was termed kaha nalu by the ancient Hawaiians." Bryan²⁶ describes it as a "favorite aquatic sport", and Mitchell²⁷ also mentions it. Bolton²⁸ gives a variation as "Honuhonu, swimming with the hands only, the feet being interlocked."

Ellis²⁹ described the popularity of swimming races in Tahiti but due to the presence of sharks was not as popular as in Hawaii.

Best³⁰ stated "in water exercises, the Maori excelled, like his Polynesian brethren of warmer climes, and this was seen in his powers as a swimmer." He also stated "the Maori practiced the side stroke, and looked with dislike upon the breast stroke. Swimming races (Kau whakataetae) naturally formed a pleasing exercise, and children learned to swim at a very early age." Buck gave a more general picture

²⁴Ellis, op.cit., p.304.

²⁵Sir Peter Buck, "Arts and Crafts of Hawaii," B.P. Bishop Museum, Special Bulletin 45 (Honolulu: Bishop Museum Press, 1957).p.384.

²⁶Bryan,op.cit., p.50.

²⁷Donald D. Mitchell, "Ancient Sports of Hawaii," Mimeographed by the Department of Public Instruction (Honolulu: 1952), p.3.

²⁸Bolton, op.cit., p.22.

²⁹Ellis, op.cit., pp.304-5.

³⁰Best, op.cit., p.141.

of the role of swimming and stated:

Swimming, was a popular pastime with both sexes. Children learned early and were sometimes assisted with gourd floats (poito hue), the gourds being allowed to dry out without puncturing and then enclosed in netting. Swimming races were popular with the young as impromptu contests. Racing over measured distances was not in vogue. Four methods of swimming were used: kau tahoe (side), kau apuru (breast), kau tawhai (overhand), and kau kiore (back). Also the natives were expert in crossing swift or flooded streams in a slanting course with the current by treading water with the erect body half out of the water. Rivers were also crossed with the aid of a grip pole (tuwhana).³¹

Stumpf and Cozens³² gave similar information and stated that "the most frequently used was the side stroke."

Basil Thompson stated:

Swimming seems to come naturally to every Fijian. As soon as a child can toddle, it is playing at the water's edge with older children, and little by little it ventures out until its feet are off the bottom. Being supposed to be a natural action like walking, no attempt is made to teach it. Inability to swim is always a source of derisive amusement.

In long-distance swimming the natives adopt a sort of side stroke, in which nothing but the head is above the water. They move smoothly and rapidly through the water, the legs and the right arm giving the propulsion, and the left hand striking downwards under the body. When a quick spurt is required, they use the overhand action with both arms alternately, with the cheek resting flat on the water as the arm on that side is driven aft. With this action they can swim at greater speed than all but the best European swimmers. They can swim immense distances, and no swimming-board or float is ever used, as in the Eastern Pacific, in surf swimming, except by children in their play.³³

³¹Buck (The Coming of the Maori), loc.cit.

³²Stumpf and Cozens (The Maoris), op.cit., p.212.

³³B. Thompson, op.cit., p.316.

Quain³⁴ made several interesting points when he stated, "All six year old children could swim swiftly and without fear," and adds that "they race in the water with burdens of mud balanced high on their heads." He made no reference to adults swimming and explained this in the foot notes as "men bathe only for cleanliness and to cool themselves; swimming is a sport for children only." Geddes³⁵ also made no reference to adults but stated: "By the children much time is spent in swimming," while Stumpf and Cozens³⁶ also only mentioned children in their article.

Of the Samoans, Stair stated:

The Samoans are expert swimmers being almost as much at home in the water as on the land. It is interesting to watch the ease of their movements, and their coolness under circumstances which would sorely perplex a European.³⁷

5. Canoe Races.
Classification.P,E:p,d.

Like many other Hawaiian sports, extensive betting accompanied canoe racing. Malo described it as:

The ancient Hawaiians were very fond of betting on a canoe race. Each man put up his bet on that crew which was in his opinion composed of the strongest canoe paddlers, and, the betting being over, they started out for the race.

If the canoe was of the kind called the kioloa (a sharp and narrow canoe made expressly for racing) there might be but one man to paddle it, but if it was a large canoe there might be two, three, or a large number of paddlers, according to the size of the canoe.

³⁴Buell Quain, Fijian Village (Chicago: The University of Chicago Press, 1948), p.306.

³⁵W.R. Geddes, "Deuba, A study of a Fijian Village", Memoirs of the Polynesian Society, Vol. 22 (Wellington: 1945), p.15.

³⁶Stumpf and Cozens, (The Fijians), op.cit., p.6.

³⁷Stair, op.cit., p.64.

The racing canoes paddled far out to sea - some however, stayed close to the land (to act as judges, or merely perhaps as spectators) - and then they pulled for the land. If they touched the beach at the same time, it was a dead heat; but if a canoe reached the shore first, it was the victor.³⁸

Culin³⁹ called canoe racing "Hei-hei-waa", and described it as, "two or more canoes race, usually out to sea, the course being a mile or a mile and a half out and around a flag buoy and return. The canoes are propelled with kapa sails." The use of outriggers is described by Bryan⁴⁰, as "canoe racing was a favorite aquatic sport and outrigger canoes usually raced toward the shore from well out to sea, the first to reach the beach winning." Mitchell⁴¹ also gave mention to the special canoe called "kioloa", as referred to above by Malo.

Ellis⁴² spoke of Tahitian canoe racing, "faatitiaihe-mo-raa vaa as occasionally practised on the smooth waters of the ocean, within the reefs."

"Canoe races (waka hoehoe and whakatere waka) were recreations that appealed to the Maori", and Best⁴³ adds: "In the excitement of a well contested canoe race, with paddles as the motive power, the Maori would find one of his keenest pleasures." Buck described it as:

Canoe racing was popular and created great excitement among the supporters of the different canoes, the support running on family and tribal lines. With large canoes with a double row of paddlers, the space between was so close that perfect time had to be observed in the dipping of the paddles. The fugleman who gave the time with various

³⁸ Malo, op.cit., p.222.

⁴⁰ Bryan, loc.cit.

⁴² Ellis, op.cit., p.294.

³⁹ Culin, loc.cit.

⁴¹ Mitchell, loc.cit.

⁴³ Best, op.cit., p.141-2.

canoe chants was important and he quickened the time of his chant to quicken the stroke of the paddlers.⁴⁴

Stumpf and Cozens⁴⁵ also made reference to canoe racing and stated that "during their leisure time the young men of the village entered into contests in activities", and included canoe racing as one of these.

Canoe racing in Fiji is described by Stumpf and Cozens⁴⁶ but the emphasis is on the sailing of canoes rather than paddling.

From the various accounts it seems that the Samoans were excellent sailors and Stair gives the following account of this:

Their canoes are frail, liable to capsize and pitch the occupant into the water; but this does not trouble them greatly, as they easily right their canoes, even in a heavy sea. Should a canoe be swamped in very bad weather as is sometimes the case, the bulk of the crew leap into the sea and hold on to the sides of the canoe while the others bale out the bilge quickly, and when all is ready the others leap into the canoe and proceed on their way. At times however, the outrigger breaks, and this is a more serious matter, as it renders the canoe unmanageable, and necessitates the crew swimming alongside and guiding the canoe to the beach, no matter at what distance from the shore the accident may have happened.⁴⁷

G. Turner⁴⁸ described how light canoes were used to "shoot" the waves by "steering little canoes while borne along on the crest of a wave towards the shore," and said this "is a favourite juvenile sport."

⁴⁴Buck, (The Coming of the Maori), op.cit., p.241.

⁴⁵Stumpf and Cozens, (The Maoris), op.cit., pp.211-2.

⁴⁶Stumpf and Cozens, (The Fijians), op.cit., pp.11-2.

⁴⁷Stair, op.cit., pp.64-5.

⁴⁸Rev. George Turner, Nineteen Years in Polynesia (London: John Shaw, 1861), p.217.

F.M. Turner⁴⁹ gave some excellent descriptions of the use of canoes in fishing. Stair listed several activities using canoes which the Samoans practiced as:

Ole Fa'ase'enga, or causing to glide, was a favourite canoe pastime. For this a small paopao or single fishing canoe was used, and the sport consisted in paddling out to meet the smaller rollers formed by waves in their passage inshore, after they have spent their strength upon the reef. The stern of the canoe is turned towards the advancing surge, and immediately its contact is felt the steersman either briskly plies his paddle or simply steers his canoe, whilst it is rapidly carried forward upon the crest of the wave.

Ole Folaulaunga, or sailing about is an amusement practised by all ranks and ages, for which a stiff breeze is required, during which many canoes may be seen gliding over a lagoon. A party of young men and lads often club together and build a rude kind of double canoe or raft. It is provided with a very large mat sail, and often affords much amusement to the owners.

Canoe races were also very common during short voyages, or on other occasions, and often afforded much amusement. It was seldom that two canoes could sail together without racing to test the speed of their respective canoes.⁵⁰

In Rotuma canoe sailing was carried on, especially on the occasions of certain big feasts in connection with religious festivals, and Gardiner described the canoes and events as:

The Canoes employed were the small ones, the tavane, with mat sails. In each canoe only one man sailed and the different districts would contest for the prize with ten, twenty, or even more representatives. There were also commonly canoe races for the women. The course was always inside the reef, and much fun was caused by the constant capsizing of the canoes.⁵¹

⁴⁹F.M. Turner, "Sport in Samoan Craft", Outing (October, 1894), pp.17-21.

⁵⁰Stair, op.cit., pp.140-1.

⁵¹J. Stanley Gardiner, "The Natives of Rotuma", Royal Anthropological Institute Journal Vol.27., 1898, p.486.

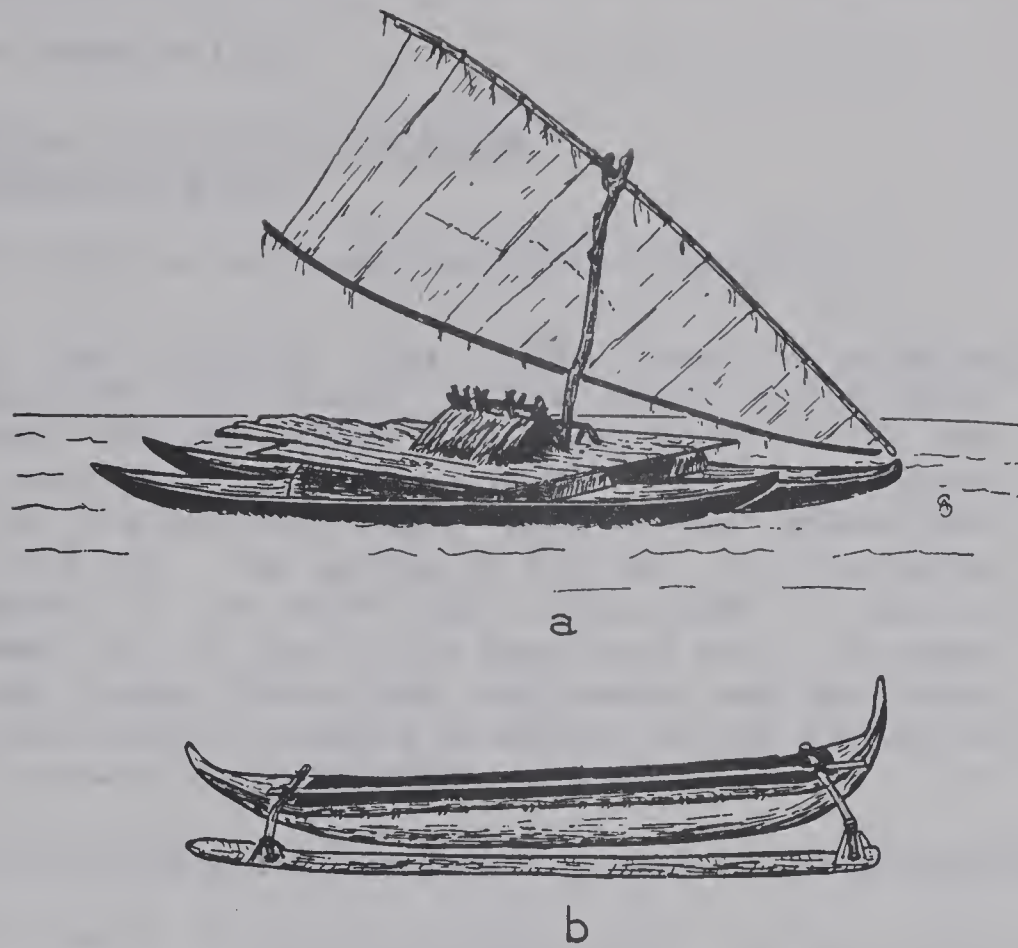


Figure 1.
Polynesian Canoes.
a, double canoe from Tonga; b, outrigger canoe from Cook Islands.
(Refer page 18)

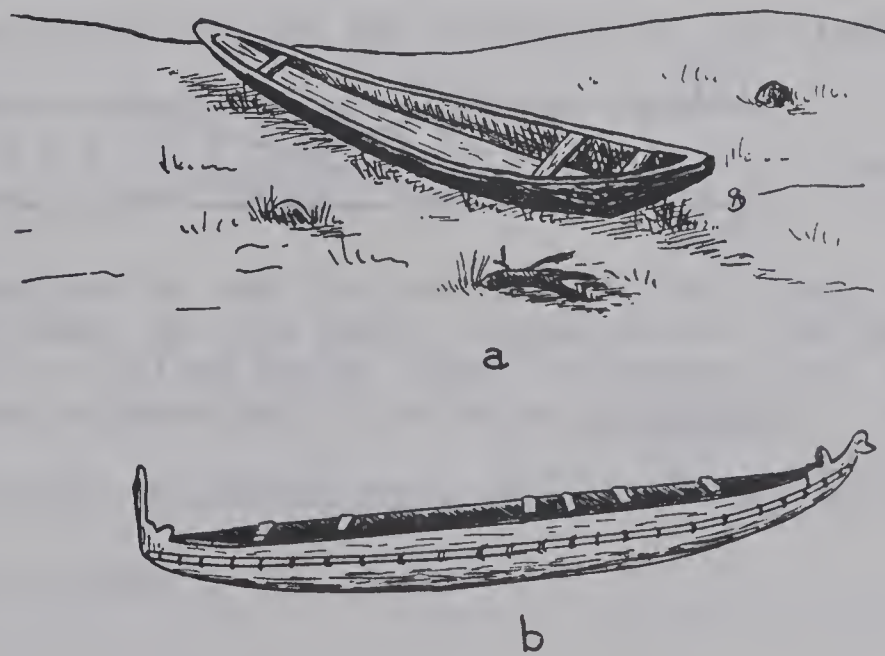


Figure 2.
Maori canoes. a, river canoe; b, sea-going canoe.
(Refer page 18)

Loeb⁵² mentioned that "the people of Niue organized canoe races as tests of superiority."

6. Eye Pointing or Ku-hi-ku-hi-ma-ka.
Classification.S:p,ex.

In Hawaii this activity was described by Culin as:

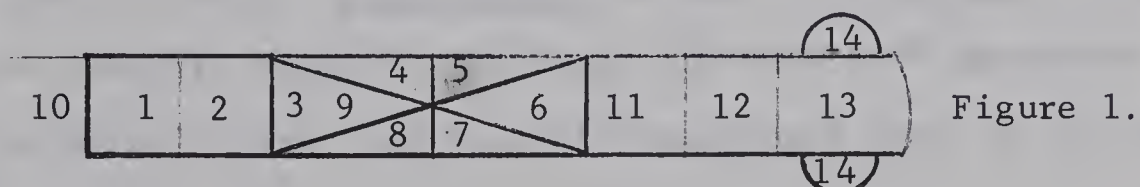
Two or more persons play. One leads by pointing repeatedly with his finger to his nose, crying "Nose! Nose! Nose!" All the others must then point in the same manner, each with his finger to his eye. The leader changes to his eye, whereupon each of the others must point to his ear. He points to his ear, and they point to the mouth; to the mouth, and they point to the top of the head; to the top of the head, and they clap their hands; the leader then claps his hands and the others point to the breast; finally he points to his breast and they all run and the game comes to a close.⁵³

He also described a similar game but calls it "Wood-Pointing or ku-hi-la-au"⁵⁴ which is similar except that the top, middle and bottom of a stick was used instead of the parts of the body.

7. Hop Scotch or Ki-no-a.
Classification. S, F: p, d.

In Hawaii ki-no-a was described by Culin as:

A diagram was drawn upon the ground as in the figure.



The players hop on one foot and kick a flat stone into the several divisions in the order indicated by the numerals. The end (13) is called la-ni, "sky" or "heaven", or pa-hu. The divisions on each side are called pe-pe-i-ao or "ear."⁵⁵

The game also was described by L. Thompson⁵⁶ as occurring in the games of Fijian children.

52 Loeb, loc.cit.

⁵³Culin, op.cit., p.217.

54 Ibid.

⁵⁵ Ibid., pp. 230-1.

⁵⁶L.Thompson, loc.cit.

8. Tag.Classification. P,SP:p,d.

This activity was described in Hawaii by Culin⁵⁷ as pla-pi-o.

"The one who is 'it' (a-ku-a) is determined by counting out. He chases the others and the first tagged becomes a a-ku-a in turn." In Fiji Quain⁵⁸ described the game as being played "on the steep slippery bank and from towering boulders the players [leap agilely] into the swift river."

Churchill stated that the Samoan children played a game called "the bat and the rats" and described it in the following words:

One player is pursued by many; the single player is called the bat, the others are the rats. The rats chase the bat and flog him with straps of the native cloth, crying all the time "Bat, give us back our wings," a reference to an old legend that the rats had wings until the bats stole them. Whenever the bat can wrest away a cloth from a rat there is a change of parts in the play.⁵⁹

9. Blind-man's Bluff.Classification. S,SP:p,d,ex.

In Hawaii blind-man's bluff was called "po-ai-pu-ni" and Culin⁶⁰ described it as "the children clasp hands in a ring, and as they dance the 'ma-ka-po' or 'blind-man' catches one and tries to guess who it is. Ellis⁶¹ said that in Tahiti "tupaurupauru, a kind of blind-man's bluff, was a favourite juvenile sport." Williams and Calvert⁶² mentioned it in Fiji as a children's game, and Russell⁶³ mentioned that it is played in Samoa and Tonga.

⁵⁷Culin, op.cit., p.232.

⁵⁸Quain, loc.cit.

⁵⁹Llewella Pierce Churchill, "Sports of the Samoans", Outing March: 1902), p.567.

⁶⁰Culin, op.cit., p.233.

⁶¹Ellis, op.cit., p.309.

⁶²Williams and Calvert, loc.cit.

⁶³Alexander Russell, Aristocrats of the South Seas (London: Robert Hale Ltd., 1961), p.143.

10. Prisoner's Base or Pa-a-ni a-lu a-lu.
Classification. P,SP:p,d.

In Hawaii pa-a-ni a-lu a-lu was described by Culin⁶⁴ as; "a number of boys play half on a side, each with its own base (pa-hu). A boy will run out from either side, and those opposite will try to catch him and bring him to their goal." Stair⁶⁵ mentioned a game in Samoa "played by a given number of young men who chose sides, the game appearing to resemble the English game of prisoner's base." Gardiner said that in Rotuma a favorite game of the girls and boys was played on moonlight nights on the beach, and he described it as:

A kind of base is marked off and then one side hides, while the others search for them; they have, if possible, to get back within this base. In another variation, two sides are formed, and join opposite one another hand in hand; they then, singing advance and retreat from one another or dance sideways up and down in front of one another. Then, when the one side has managed to get the other all moving in the opposite direction, it suddenly turns, while the other side pursues it down the beach and tries to surround it.⁶⁶

In Fiji Hocart described a game called Veimbuka which was a cross between tag and prisoner's base. He described it as:

A straight line is drawn on the beach some eighty meters long, it is called isoso. In the middle is a small mound (mata ni isoso), which divides the line between two teams (to). The teams line up on each side of the mata. A boy, called mbithi, runs out from one camp and seeks to reach the opponent's line; of course it is no use making straight for it, so he has to run out with as much slant towards the adversaries' line as the latter allow, for they rush out in a mass to catch him; the one who touches him first is chased by party No.1, while he tries to run around them or dodge through them to his own line; the one who catches him is chased in his turn. The player caught last and his captor stand to each other as veitumbuna, i.e., grand mother and grand child, the captor is tumbuna (grandmother), the boy he

⁶⁴Culin, loc.cit.

⁶⁵Stair, op.cit., p.136.

⁶⁶Gardiner, op.cit., p.488.

touches makumbuna (grand child); the makumbuna may not catch the tumbuna until he has been caught by another. If the pursuant can reach the enemies line uncaught, he places one foot on it; he is said to so, and scores one point (kai) for his side. The so is recorded by digging a finger into the mata; the holes are made along two parallel lines, each beginning its record on the opposite side and extending to their own. After each so they begin again.⁶⁷

11. Hide and Seek or "Hiding-as-a-ghost" or Pe'epe'e-akua.
Classification.SP,P:p,s.

This activity was described by Pukui in Hawaii who stated:

This was played always in the open because hiding in the house or even hiding from another out-of-doors "just for fun" became a sign of separation and was considered unlucky. One was chosen as "master", and the boys would lie down on their faces in one group, the girls in another, and the "master" would thump first upon the back of a boy, then a girl, reciting in a half chant,

<u>Ku'i,ku'i hana pele</u>	Pound, pound, make a bell (?)
<u>Holo iuka, holo i kai,</u>	Run inland, run seaward,
<u>Holo i kahi e pe'e ai,</u>	Run to a place where you are hidden,
<u>A nalo.</u>	And hide.

At the word "hide", the boy or girl would dart away to his hiding place. "Hold, hold your breath so as not to be seen!" was another formula used. When all were hiding, the leader went in search of them, touching the pahu pahu ("goal") as each was discovered.⁶⁸

Culin⁶⁹ gave a different method of starting the game: "the one who is 'it', called a-ku-a, 'ghost' or 'god', is determined by counting out." Both Bryan⁷⁰ and Mitchell⁷¹ mention it as a children's game but Mitchell also states it was often played by adults as well.

⁶⁷A.M. Hocart, "Two Fijian Games", Man Vol.9., No.108, 1909 pp.184-5.

⁶⁸Kawena Pukui, "Games of My Hawaiian Childhood", California, Folklore Quarterly, (Vol. II., No.3., July, 1943), p.208.

⁶⁹Culin, op.cit., pp.231-2. ⁷⁰Bryan, op.cit., p.51.

⁷¹Mitchell, loc.cit.

The Maori played hide and seek and Best⁷² said "the game of taupunipuni seems to have been the same as hide-and-seek." Tregear⁷³ also mentioned the game as being played by children.

Williams and Calvert⁷⁴ described it as being one of the "many Fijian sports which fill up their vacant hours," as did B. Thompson.⁷⁵

The game was played with some variations in Samoa and Turner⁷⁶ stated: "they have also a game of hide-and-seek, with the addition that those who hide try to escape those who seek, and run to a given post or mark. All who reach the post are counted towards making up the game." Stair⁷⁷ said that "hide-and-seek was played in the water." In Niue Loeb⁷⁸ stated that "the game of hide-and-seek enters into several of the animal fables of the people" but he doubts that "the adult natives enjoyed such an undignified pastime."

B. ACTIVITIES AND GAMES WITH CHANCE CHARACTERISTICS

12. Cock-Fighting or Hoo-haka-moa. Classification.C,S,SP:c,ex.

In Hawaii, Malo described hoo-haka-moa as:

Cock-fighting (haka-moa) was a very fashionable sport with the alii, and was conducted in the following manner. A person who was a good judge of fowls would secure one which he thought to be a good fighter.

A roost was then made, on which to place the cock, and every night a small fire was started under him to make him lively.⁷⁹

⁷²Best, op.cit., p.157.

⁷³Edward Tregear, The Maori Race (London: A.D. Willis, Printer and Publisher, 1904), p.57.

⁷⁴Williams and Calvert, loc.cit. ⁷⁵B.Thompson, op.cit.,p.328.

⁷⁶G. Turner, op.cit., p.215. ⁷⁷Stair, op.cit., p.139.

⁷⁸Loeb, loc.cit.

⁷⁹It was imagined that the motions made by the cock in thrusting his head to one side and the other, in his efforts to escape the heat and pungent smoke, were just the exercises needed to fit him for his duties as a fighter.

A multitude of people assembled to witness the match and to bet on the result. When the experts had studied the two cocks and had made up their minds which would fight to the death, they made their bets, often betting all their own property, as well as all they could borrow.

When the betting was done, the president, or luna hoomalu, of the assembly stood forth and a rope was drawn around the cock pit to keep the people out. Any one who trespassed within this line was put to death.

The cocks were then let loose and the multitude flocked about the cock pit. If the cocks were equally matched it was a drawn battle (pai wale); but if one of them ran away from the other, that gave victory to the latter.⁸⁰

Fornander also gave an interesting description of the selection and training of suitable cocks:

A cock has a trait to be looked for, and by the features a powerful or weak rooster might be known. If the cock was of grey and white spots, or yellow, or any other color, if the voice was despicable and the fowl looked weighty and big bellied, it was called "auhá", full of excrements. If the bird was of a whitish grey and the voice agreeable, like the voice of the wild duck, and the bill black, it was a bony black bill. It was very powerful for three rounds and long-winded during the fight. If a red bird and slow in crowing, it was a very long-winded cock before its adversary.

Counts made by a rooster were of great importance. If the fowl was strong in kicking it was a count. If strong at pecking it was a count; if strong at striking with the wings it was a count; if the adversary ran away it was a count. If that one rooster possessed all the counts, it was a powerful bird, it could get three or four opponents.⁸¹

Culin⁸² stated that "cock fights are fought on holidays in the public squares, with bets being waged on the contest. The battles are to the death. The combs are not trimmed, but the spurs are cut off and the cocks fight with their beaks." Both Bryan⁸³ and Mitchell⁸⁴

⁸⁰Malo, op.cit., pp.230-1.

⁸¹Fornander, op.cit., p.216.

⁸²Culin, op.cit., pp.217-8.

⁸³Bryan, op.cit., p.50.

⁸⁴Mitchell, op.cit., p.4.

mentioned this sport and its connection with betting. Alexander⁸⁵ stated it was "much practiced in ancient times. Few of the contests were ever fought without a wager."

Ellis⁸⁶ stated that "the most ancient game among the Tahitians, was the faatitoraamoa, literally, the causing fighting among fowls, or cock fighting." There did not appear to have been any betting associated with this sport in Tahiti nor was there any great importance attached to the color of the birds as is the case in Hawaii. On these matters Ellis wrote:

The Tahitians do not appear to have staked any property, or laid any bets, on their favourite birds, but to have trained and fought them for the sake of the gratification they derived from beholding them destroy each other.

The natives were universally addicted to this sport. The inhabitants of one district often matched their birds against those of another, or those of one division of a district against those of another division. They do not appear to have entertained any predilection for particular colour in the fowls, but seem to have esteemed all alike.

More than two were seldom engaged at once, and so soon as one bird avoided the other, he was considered as vi, or beaten.⁸⁷

Cock fighting was practiced in other islands, and Turner⁸⁸ stated that it was "numbered among Samoan sports." In Rotuma a variation is described by Gardiner as:

In times of peace meetings used to be held between the different districts for cock-fighting, wrestling, canoe-sailing, etc. For the former the chiefs used to breed a small cock, somewhat similar to the Malayan fowl; great care was taken in the feeding, and the spur was especially sharpened and oiled. Usually pigs were put up on both sides, and went to the conquerors.⁸⁹

⁸⁵Alexander, op.cit., p.91.

⁸⁶Ellis, op.cit., p.302.

⁸⁷Ibid., pp.302-3.

⁸⁸G. Turner, op.cit., p.217.

⁸⁹Gardiner, op.cit., p.486.

Cock-fighting was also practiced in the Society Islands and Handy⁹⁰ wrote that, among "various minor forms of sport...belonged to the arii group."

13. Hand Betting or Pi-li-li-ma.
Classification.E,SP:c,s,d.

In Hawaii, pi-li-li-ma was described by Culin⁹¹ as: "two players simultaneously extend their closed hands containing marbles or similar small objects, at the same time crying a number. The one who guesses the sum of the objects wins them all." Tregear⁹² described a Maori game which was similar, called "ti or komikomi... played with the fingers, these being rapidly open and shut."

14. Stick Drawing or Drawing Straws.
Classification.SP:c.

Stick drawing was called hu-ki-la-au in Hawaii and Culin⁹³ described it as "one player prepares two slips of wood of uneven length, and the other draws. If the drawer gets the long piece, he wins; if the short piece, he loses."

15. Pig Guessing or Ko-ho-ko-ho-pu-aa.
Classification.C,SP:c.

In Hawaii, ko-ho-ko-ho-pu-aa was described by Culin as:

This is a kind of a lottery. The principal stake consists of pigs (pu-aa). One hundred cards are prepared, on which are written the names of various articles of food, as pig, fowl, banana, bread fruit, oranges, eggs, etc. Twenty persons each draw a card, the object being to get the one marked "pig". If this is not drawn the first time, the drawing is repeated until someone gets it. This lottery is held on a holiday. The prizes are offered by some rich person. The winner gets five pigs.

⁹⁰E.S. Craighill Handy, "History and Culture in the Society Islands", B.P. Bishop Museum, Bulletin 79 (Honolulu: Bishop Museum Press, 1930), p.65.

⁹¹Culin, op.cit., p.231.

⁹²Tregear, op.cit., p.59.

⁹³Culin, op.cit., p.245.

Afterwards the assembled company eats the other food that has been provided.⁹⁴

C. ACTIVITIES AND GAMES WITH STRATEGY CHARACTERISTICS

16. Boxing.

Classification. P,C,SP;s,d,p*

Boxing was one of the favorite pastimes of the Polynesian people, both as competitors and spectators. Alexander wrote of Hawaii:

Among their athletic sports that of mokomoko or boxing was the favorite national game. It was regulated by fixed rules, and presided over by umpires. The champions generally belonged to different chiefs or districts, and were attended by crowds of partisans. As many as ten thousand spectators were present on these occasions. A knock-down or blood-starting blow was followed by deafening yells, dancing and the beating of drums by the surrounding multitude. The elated victor strutted around the ring, challenging others to the contest, until he met his match. It was not uncommon for several to be left dead in the arena during one of these games.⁹⁵

Bryan gave a good description of the event and wrote:

These were conducted on regular arenas (kahua) marked by poles with tapa streamers and bird feathers, before large crowds of noisy spectators. Boxing was with bare fists: the blows were aimed chiefly at the adversary's head and were caught on the clenched fist instead of being warded with the forearm. Decisions were given both for knockouts and attempts to shun or escape an opponent.⁹⁶

Malo⁹⁷ described how "the one who fell was often badly maimed, having an arm broken, an eye put out, or teeth knocked out" and he suggests the reason for the broken arms to be that "the Hawaiians do not seem to have used the forearm, after the manner of modern practioners of the 'noble art'. Each boxer sought to receive his

⁹⁴Ibid.

⁹⁵Alexander, op.cit., pp.88-9.

⁹⁶Bryan, op.cit., p.48.

⁹⁷Malo, op.cit., p.232.

Handy¹⁰² states that when Lono, the God of sport, was being paid homage, he was "entertained by boxing matches in which both men and women participated."

Corney¹⁰³ also mentioned boxing being the main event at these religious festivals.

Maori boxing as described by Buck¹⁰⁴ was "with the bare fists 'but' was more in the nature of private quarrels when no weapon was handy. The forward thrust with the front of the fist was termed mekemeke but a blow with the little finger side of the fist was termed moto." The interesting point was that "boxing contests such as occurred in Tonga and Hawaii were apparently unknown." Stumpf and Cozens¹⁰⁵ stated that "during their leisure time the young men entered into contests in such activities as boxing, etc." But this may not have been at any level of organization as was the case in Hawaii.

In Tahiti boxing was not as popular as wrestling and it appeared that boxing was a lower class sport than was wrestling. Ellis stated:

On all great public festivals, wrestling was succeeded by the Moto raa, or boxing. This does not appear to have been so favourite an amusement with the Tahitians as wrestling; and there was generally a smaller number to engage. It was mostly practiced by the lower orders and servants of the areois, and was with them, as boxing is every where, savage work. The challenge was given in the same way as in wrestling; but when the combatants engaged, the combat was much sooner ended, and no time was spent in sparring or parrying the blows. These were generally straight forward, severe and heavy; usually aimed at the head. They fought with the naked fist, and the whole skin of the forehead has been at times torn or driven off at a blow. No one interefered with

¹⁰²Handy, (Polynesian Religion), op.cit., p.303.

¹⁰³Peter Corney, Early Northern Pacific Voyages (Honolulu: Thos. G. Thrum, Publisher, 1896), p.102.

¹⁰⁴Buck, (The Coming of the Maori), op.cit., p.240.

¹⁰⁵Stumpf and Cozens, (The Maoris), op.cit., p.211.

opponent's blow with his own fist. This meeting of fist with fist was likely the cause of the frequent broken arms."

Culin⁹⁸ suggested that the fists were not bare but "were wrapped in kapa, tied at the wrist," and he described the method of boxing in a variation from the other literature already cited:

When the sports were ready to begin, the signal was given by the judges and immediately two combatants appeared. They came forward slowly, lifting their feet very high behind, and drawing their hands along the soles. As they approached, they frequently eyed each other from head to foot in a contemptuous manner, casting several arch looks at the spectators, straining their muscles, and using a variety of affected gestures. Being advanced within reach of each other, they stood with both arms held out straight before their faces, at which part all their blows were aimed. They struck, in what appeared to our eyes an awkward manner, with a full swing of the arm; made no attempt to parry but eluded their adversary's attack by an inclination of the body, or by retreating. The battle was quickly decided, for if either of them was knocked down or even fell by accident, he was considered vanquished.⁹⁹

Fornander¹⁰⁰ stated that "the blows had been delivered with great force and struck the nose, the eyes, the chin, discoloring the eye, dislocating the nose and disjuncting the jaw." Bolton¹⁰¹ also described the ferocity of this sport as being "sometimes attended by fatal results; the more freely blood flowed in combat the greater the delight of the spectators; in this respect emulating the features of a modern prize-fight."

⁹⁸Culin, op.cit., p.207.

⁹⁹Ibid.

¹⁰⁰Fornander, op.cit., p.204. ¹⁰¹Bolton, op.cit., p.21.



Figure 4.
A typical bird used in cock-fighting contests.
(Refer page 27)



Figure 5.
A boxing match before Captain Cook.
(Refer page 31)

the combatants while engaged; but as soon as either of them fell, or stooped, or shunned his antagonist, he was considered vanquished, the battle closed, and was instantly succeeded by the shouts and dances of triumph.¹⁰⁶

G. Turner¹⁰⁷ stated that in Samoa "boxing was common formerly on festive days, and often led to serious quarrels," and he said "women as well as men entered the ring, and strove for the fame of a pugilist." Stair¹⁰⁸ also mentioned boxing as a "common" sport, but Churchill¹⁰⁹ states that even though "boxing is common enough now among Samoan athletes, ... it is an introduced sport. Old customs of warfare never included any such thing as an empty personal encounter." Unfortunately no mention is made as to whether the introduction was done by whites or other Polynesians.

Handy¹¹⁰ stated that boxing was a form of amusement or sport in the Society Islands, while Loeb¹¹¹ stated that in Niue "wrestling was formerly indulged in, especially at the times of feasts, but boxing was apparently unknown."

17. Fencing or Kaka la'au.
Classification. P,SP:s,d,p*

In Hawaii kaka la'au was described by Bryan¹¹² as being "done with six to nine-foot sticks, without protection to the body. Professional warriors (koa) also practiced throwing spears at each other."

¹⁰⁶Ellis, op.cit., p.292.

¹⁰⁷G. Turner, op.cit., p.212.

¹⁰⁸Stair, op.cit., p.136.

¹⁰⁹Churchill, op.cit., p.563.

¹¹⁰Handy, (Society Islands), loc.cit.

¹¹¹Loeb, loc.cit.

¹¹²Bryan, op.cit., p.49.

Culin¹¹³ said it was practiced on holidays with wooden swords.

The name ka-ka-pa-hi, is derived from ka-ka, 'to strike' and pa-hi 'knife', 'sword'." The actual contest was described by Mitchell as:

Each contestant uses a wooden spear or pole six or seven feet long to strike or ward off blows. A player scores when he touches any part of his opponent's body except his head, with his spear. The first player to score ten strikes against his challenger may be declared the winner.¹¹⁴

Tregear¹¹⁵ described "para-whakawai" as "fencing bouts with spears, etc, among men," as a Maori game. G. Turner¹¹⁶ stated that fencing was common in Samoa formerly on festive days, and this often led to serious quarrels," and that "they used the stalk of the coco-nut leaf as a substitute for a club." As stated the club was used instead of the wooden spear but Stair stated that club-fights were common and described them as:

The club fights of the Samoans were very severe and even savage encounters, the combatants fighting with the large butt ends of coconut-leaves (lapalapa), large clubs in fact, which were very heavy and tough. Armed with these formidable weapons they made furious onslaughts on each other, and broken heads and arms frequently followed as a result.¹¹⁷

18. Wrestling.

Classification. P,SP:s,d,p*

Malo wrote that hakoko or wrestling was a very popular sport in ancient Hawaii. It was generally done in the midst of a large assembly of people, as was the boxing game mokomoko.

¹¹³Culin, op.cit., p.208.

¹¹⁴Mitchell, op.cit., pp.13-4.

¹¹⁵Tregear, op.cit., p.58.

¹¹⁶G. Turner, loc.cit.

¹¹⁷Stair, op.cit., pp.136-7.

The multitude formed a circle, the wrestlers took their stand in the centre; and then having seized hold of each other, they struggled to trip each other with the use of their feet, striving with all their might to throw each other to the ground.

The one who was thrown was beaten. A man who was a strong and skillful wrestler was made much of. Wrestling was much practiced about court, very little in the country districts.¹¹⁸

Culin¹¹⁹ stated that "the contestants wear only breechcloths. They each put one arm around the other's neck and the other around the waist. People bet on the contest." Alexander¹²⁰ said that it was a game less fatal in its results," while Handy¹²¹ stated that it was practiced on all occasions at religious festivals.

There are many variations of Hawaiian wrestling. Bolton¹²² described "loulou, a trial of strength by hooking the fingers, and uma, a trial of strength of arms, and Kulakulai, wrestling in the sea." Bryan described a "super" form of wrestling similar to jujitsu called:

Lua or kaialua, often called 'bone breaking, to the more gentle hand wrestling (uma). In the latter the contestants knelt facing each other, with right elbows on the ground and right hands clasped. The object was to make the back of the opponent's hand touch the ground. In a variation of this (pa-uma) the object was to push the hand to the opponent's breast.¹²³

¹¹⁸ Malo, loc.cit.

¹¹⁹ Culin, loc.cit.

¹²⁰ Alexander, op.cit., p.89.

¹²¹ Handy, (Polynesian Religion), op.cit., p.306.

¹²² Bolton, op.cit., pp.21-2.

¹²³ Bryan, op.cit., p.48.

Malo¹²⁴ also described Kuialua as "an exhibition of lua for amusement. Lua was a murderous system of personal combat which combined tricks of wrestling with bone-breaking, the dislocation of limbs, and other thug-like methods that put it outside the pale of civilized warfare. It was used by robbers."

Mitchell gave several variations as follows:

Kulakula'i, chest slapping, to slap or push the upper part of his body with your open palms, the thrusts must be avoided to maintain balance. A strong slap to the chest should send your opponent back out of his standing position and score a point for you.

Uma, hand wrestling ... [already described]

Pa uma, standing wrist wrestling, players stand facing each other and clasp right thumbs, at a signal try to overcome your opponent's thrust and push his hand or both your hands and his to his chest.

Loulou, pulling interlocked index fingers, two players take a firm stand facing each other, lock index fingers, and pull until one lets go or is pulled so far out of position.

Kula'i wawae, foot pushing, players pair off and sit, each attempts to unseat the other by pushing against his feet.¹²⁵

Culin¹²⁶ also described "uma, or arm wrestling; u-lu-mi i-lo-ko o-ke kai, or wrestling in the sea, one man tries to 'duck' another and reach shore before the ducked one can catch him; Hu-ki-hu-ki-a-i or neck pulling, each of two persons puts a loop around his neck and pulls endeavouring to pull the other over; and hu-ki-hu-ki-li-ma, or finger pulling."

¹²⁴Malo, op.cit., p.233.

¹²⁵Mitchell, op.cit., pp.10-12.

¹²⁶Culin, op.cit., p.210.

In Tahiti Ellis described wrestling as follows:

The favourite, and perhaps most frequent sport; hence the taupiti, or assembly, was often called the taupiti moana, assembly for wrestling.

The wrestlers of one district sometimes challenged those of another, but the trial of strength and skill often took place between the inhabitants of different islands; the servants of the king of the island forming one band, and those in the train of his guest the other.

In this, as in most of their public proceedings, the gods presided. A space covered with a grassy turf, or the level sands of the sea-beach was usually selected for these exhibitions. Here a ring was formed, perhaps thirty feet in diameter, the aufenua, people of the country being on one side, the visitors on the other. Six or ten, perhaps, from each side, entered the ring at once, wearing nothing but the maro or girdle, and having their limbs sometimes anointed with oil.

If arrangements had been made prior regarding matches, they closed at once, without ceremony. But if no such arrangement had been made, the wrestlers of one party, or perhaps their champion, walked across the ring, having the left arm bent, with the hand on the breast, striking the right hand violently against the left, and the left against the side, producing a loud hollow sound, which was challenging any one to the trial of his skill. The strokes on the arm were sometimes so violent, as not only to bruise the flesh, but to cause blood to gush out.

When the challenge was accepted, the antagonists closed, and the most intense interest was manifested by the parties to which they respectively belonged. Several were sometimes engaged at once, but more frequently only two. They grasped each other by the shoulders, and exerted all their strength and art, each to throw his rival; this was all that was requisite; and although they generally grappled with each other, this was not necessary according to the rules of the game.

The most unbroken silence and attention was manifested during the struggle; but as soon as one was thrown, the scene was instantly changed; the vanquished was scarcely stretched on the sand, when a shout of exultation burst from the victor's friends.

However great the clamour might be, as soon as the wrestlers who remained in the ring engaged again, the drums ceased, the song was discontinued, and the dancers sat down. All was perfectly silent, and this issue of

a second struggle was awaited with as great an intensity of interest as the first. If the vanquished man had a friend or taio in the ring, he usually arose and challenged the victor, who having gained one triumph, either left the ring, which it was considered honourable for him to do, or remained and awaited a fresh challenge. If he had retired, two fresh combatants' engaged, and when one was thrown, exhibitions of feeling, corresponding with those that had attended and concluded the first struggle, were renewed, and followed every successive engagement. When the contest was over, the men repaired again to the temple, and presented their offering of acknowledgement, usually young plantain trees, to the idols of the game.

Although wrestling was practiced principally by the men, it was not confined to them. Often, when they had done, the women contended, sometimes with each other, and occasionally with men, who were not perhaps reputed wrestlers. Persons in the highest rank sometimes engaged in the sport.¹²⁷

The Maoris were deeply interested in wrestling. Buck¹²⁸ said that: "mamau, whakatoto, nonoke, was probably the most highly regarded of the athletic exercises and had a terminology for the various holds and tricks." Of the various styles he wrote, "catch-as-catch-can, holding by the arms alone, and holding around the body as in the Cumberland style were all used. The champion wrestler of the tribe acquired much honour and matches were often arranged with the experts of other tribes." This last point was also brought out by Tregear who stated:

Wrestling (ta or whatoto or nonoke or mamau) was indulged in as a favourite sport of young men, some of whom arrived at great celebrity through their agility and prowess at this exercise. There were many named wrestling grips, (whiu,

¹²⁷Ellis, op.cit., pp.288-92.

¹²⁸Buck, (The Coming of the Maori), loc.cit.

whiri, taha, etc.). Sometimes a woman or two young women would wrestle with a young man; this was called para-whakawai.¹²⁹

Best¹³⁰ also gave a similar description and stated that "occasionally young women joined in this recreation, when two would be pitted against one male." He also described how "wrestlers would recite a charm prior to engaging in a bout of wrestling; at the same time the reciter would expectorate into his hand, and close the hand-presumably for luck." Stumpf and Cozens¹³¹ also mentioned that wrestling was a leisure time activity and that contests were entered into by the young men of the village.

In Fiji a variation of wrestling, already described, took place. It was called "veisanka or veisaga" and both B. Thompson¹³² and Williams and Calvert gave a similar description. Williams and Calvert described it as:

The veisaga is practised on a large scale in some parts of the group. Upon the top of a hill men and women assemble to sport and wrestle. If a man closes with a woman, he attempts to throw her, and, on succeeding, they both roll together down the hill. Sometimes a sprain is the consequence; but the sufferer takes care to conceal the accident, lest the taunts and ridicule of the crowded spectators should be added to his misfortune.¹³³

Another variation of wrestling was called "veisolo" and B. Thompson¹³⁴ stated that it "is a custom rather than a game" and both he and Williams and Calvert described it as:

¹²⁹Tregear, op.cit., pp.57-8. ¹³⁰Best, op.cit., p.140.

¹³¹Stumpf and Cozens, (The Maoris), loc.cit.

¹³²B. Thompson, op.cit., p.329.

¹³³Williams and Calvert, op.cit., p.128.

¹³⁴B. Thompson, op.cit., pp.329-30.

The veisolo is another rough sport. In the cases which I saw, the attack was made by women on a number of male visitors. They waited until food was brought to the men, and then rushed on their guests, endeavouring to disperse them, and take away the food. The men either from custom or gallantry, merely retaliated by taking the women captives, or throwing them gently on the ground. The women however, were not so mild; and I was acquainted with instances of men dying from the violence of their blows.¹³⁵

Of wrestling in Samoa, Churchill gave the following description:

Wrestling is of unknown antiquity among the islanders, and has always been a favorite sport of the strongest men. It could scarcely be expected that it would develop along the same lines as wrestling in other lands, and it has not. It would be hard to classify the Samoan style of wrestling. Any hand-hold above the hips is permissible, but a mere hand-hold is naturally of little value in grasping a man fully oiled, as are these people at all times. The fall is counted when one of the contestants is brought to the ground and his opponent is clear from contact with him. The falls are commonly very violent, and the sport is very rough at all stages, so rough that accidents are frequent. For that reason the Samoans have been glad to learn the less perilous methods of wrestling in vogue among civilized athletes. It is uncertain how the contest would result between equally matched experts in the two styles; among the Samoans themselves, when they have essayed a contest of the styles, the advantage has been with the rougher island method.¹³⁶

G. Turner gave two variations of wrestling as:

Sometimes they choose sides, say four against four; and the party who have the most thrown have to furnish their opponents with a cooked pig, served up with taro, or supply any other kind of food that may be staked at the outset of the game. A supply of some kind of food is the usual forfeit in all their games.

Clasp and undo is another kind of wrestling. One man clasps a second tightly around the waist, and this second does the same to a third. The three thus fastened together lie down and challenge any single man to separate them. If he succeeds, they pay a forfeit, if not, he does.¹³⁷

¹³⁵Williams and Calvert, loc.cit. ¹³⁶Churchill, op.cit., p.564.

¹³⁷G. Turner, loc.cit.

Stair¹³⁸ mentioned wrestling as a common sport and described a variation as a "kicking-match, in which the combatants endeavoured to kick each other down."

In Rotuma, Gardiner gave the following description of wrestling:

In wrestling any fall to the ground is counted. The chosen champions watched each other carefully from a distance, and then, perhaps one would rush on the other and make a feint, only to turn aside when they seemed bound to come to close quarters. The great idea was to get one's opponent, from the nature of his or your rush into an awkward position, so that he could be seized around one thigh, and could not avoid a fall.¹³⁹

In the Society Islands Handy¹⁴⁰ described wrestling as being "one of the various minor forms of amusement or sport," whereas in Niue Loeb¹⁴¹ stated that "wrestling was indulged in, especially at the times of feasts." He also described a variation as:

A rather rough game called pa pa teliga, which is still played. The object apparently is to down the opponent by the ears. Four or more people play the game sitting in a circle. They interlace arms, taking strong hold on the bottom of their ears. Then by leaning backwards, they attempt to force their opponent either to tug away at his ears, or else to yield to circumstances and fall back on the ground.¹⁴²

¹³⁸Stair, op.cit., p.136.

¹³⁹Gardiner, loc.cit.

¹⁴⁰Handy, (Society Islands), loc.cit.

¹⁴¹Loeb, loc.cit.

¹⁴²Ibid.



Figure 6.
Hand wrestling (Refer page 36)



Figure 7.
Hand wrestling (Refer page 36)

19. Tug-of-War or Hu-ki-hu-ki-kau-la.
Classification. SP,P:s,d,ex*.

In Hawaii Culin described hu-ki-hu-ki-kau-la as:

The teams consist of seven men on each side, each with a captain. A piece of kapa is tied to the middle of the rope and it is required to pull it a certain distance to one side or the other in order to win. It is played for money prizes.¹⁴³

Mitchell¹⁴⁴ also reported the activity but gave no rules or techniques.

In Fiji, Stumpf and Cozens¹⁴⁵ described it as follows: "The veidre, or tug-of-war, belongs to the most ancient of Fijian traditions, with village pulling against village, or tribe against tribe, in the presence of a great concourse of people and pigs."

In Samoa, Stair¹⁴⁶ stated "pulling, or trial of strength, was similar to the English tug of war, in which each side aimed to get possession of a pole held between them." Gardiner¹⁴⁷ described a variation in that players formed two teams, "each clasping the one in front around the waist, while the two strongest of the opposite sides have hold of each other's wrists.

In Niue, Loeb¹⁴⁸ said that tug-of-war and other similar games were organized "as tests of superiority."

¹⁴³Culin, loc.cit.

¹⁴⁴Mitchell, op.cit., p.2.

¹⁴⁵Stumpf and Cozens, (The Fijians), op.cit., p.11.

¹⁴⁶Stair, loc.cit.

¹⁴⁷Gardiner, op.cit., p.488.

¹⁴⁸Loeb, loc.cit.

20. Finger Pulling or Hu-ki-hu-ki-li-ma.
Classification.SP,P:s,d.

This activity was briefly described as a variation of wrestling, but it has sufficient references to warrant its inclusion as an activity rather than a variation of another physical activity. In Hawaii, Culin¹⁴⁹ described finger pulling as: "Two persons lock forefingers and each endeavors to pull the other's finger straight." Malo¹⁵⁰ gave a similar description but called the activity "loulou, two persons would hook fingers together, and then pull to see who would hold out the longest, without letting go or straightening out his finger." Mitchell¹⁵¹ also described the activity as follows: "Two players take a firm stand facing each other, lock index fingers, and pull until one lets go or is pulled so far out of position that the referee declares him the loser."

In New Zealand the Maoris called a similar game potokotoko and Tregear¹⁵² described it as a "game played by one person trying to catch the protruding finger in a loop of flax," and endeavoring to pull the other towards them.

21. Coconut Shell Casting or Nou-nou-pu-ni-u.
Classification.SP:s,d.

In Hawaii, Culin described nou-nou-pu-ni-u as:

A coconut is hollowed out and suspended by a cord, and the players throw at it with balls made of kapa. One acts as a banker and pays a prize to a player who hits the coconut a certain proportional number of times.¹⁵³

¹⁴⁹Culin, loc.cit.

¹⁵⁰Mallo, loc.cit.

¹⁵¹Mitchell, op.cit., p.11.

¹⁵²Tregear, op.cit., p.57.

¹⁵³Culin, op.cit., p.227.

22. Ball Game or Ki-ni-ho-lo.
Classification.F,SP:s,d.

In Hawaii, Culin described ki-ni-ho-lo as:

A ball game, described by native informants as played with a rag ball made of kapa, which is struck with the open hand. From ki-ni, and ho-lo "to run". It is a similar game to baseball, and ki-ni-po-po is the general name for all games of ball.¹⁵⁴

Culin also described another ball game called pe-ku-ki-ni-po-po or "ball kicking" as:

A game of football was formerly played with a large ball made of kapa. A hole somewhat larger than the ball was dug in the ground on each side as a goal, and the object of the game was to force the ball into the opponent's hole.¹⁵⁵

In Tahiti, Ellis described tuiraa, or football as:

A frequent game, though perhaps it was followed more by the women than the men: yet whole districts engaged in this amusement. In this, they employed the foot [to strike at the ball], and each party endeavoured to send it beyond the opposite boundary line, which had been marked out before they began. When either party succeeded in this, the air was rent with their shouts of success.¹⁵⁶

Ellis also described another foot-ball game called haru raa puu or "seizing of the football, as the favourite game of this kind":

The females alone engaged in seizing of the ball; in projecting which, neither sticks [as in a game played similar to bandy] nor feet were allowed to be applied. An open place was necessary for all their sports, and the sea beach was usually selected. The boundary mark of each party was fixed by a stone on the beach, or some other object on the shore, having a space of fifty or a hundred yards between. The ball was a large roll or bundle of the tough stalks of the plantain leaves twisted closely and firmly together. They began in the centre of the space. One party, seizing the ball, endeavoured to throw it over the boundary mark of the other.

¹⁵⁴Ibid.

¹⁵⁵Ibid.

¹⁵⁶Ellis, op.cit., p.297.

As soon as it was thrown both parties started after it, and, in stooping to seize it, a scramble often ensued among those who first reached the ball; the numbers increased as the others came up, and they frequently fell one over the other in the greatest confusion. Amidst the shouts, and din, and disorder that followed, arms or legs were sometimes broken before the ball was secured. As the pastime was usually followed on the beach, the ball was often thrown into the sea; here it was fearlessly followed, and, with all the noise and cheering of the different parties, forty or fifty women might sometimes be seen, up to their knees or their waists in the water, splashing and plunging amid the foam and spray, after the object of their pursuit.¹⁵⁷

Football in Tahiti was also described by Russell except that he referred to the game as "basketball" and it closely resembled the game of haru raa puu or seizing the football. It was described as follows:

The Tahitian women were fond of the less skilful basketball but their basketball had no baskets. Stones marked the ends of the playing fields and to throw the large ball over any part of the line was a goal. As the game advanced, the noise of the contestants drew more and more players to the scene until sometimes the playing field got so congested that players had difficulty in moving at all. The game then became a massed scramble of yelling women and even broken arms and legs did not stop the play.¹⁵⁸

In Fiji, Geddes¹⁵⁹ described a game similar to soccer which was played and "at which they were both keen and adept."

In Rotuma, Gardiner¹⁶⁰ described children's ball games and stated that they "have a ball made square of cocoanut or pandanus leaves, and sometimes stuffed with grass." In the Marquesas Islands Linton described a game called pohutu as follows:

¹⁵⁷ Ibid, pp.297-8.

¹⁵⁸ Russell, loc.cit.

¹⁵⁹ Geddes, loc.cit.

¹⁶⁰ Gardiner, op.cit., p.487.



Figure 8.
Hawaiian children playing tug-of-war.
(Refer page 45)



Figure 9.
Konane or checkers board cut into stone.
(Refer page 50)

Pohutu consisted of a bundle of fau leaves rolled up and bound with pandanus strips, the whole forming a ball about two inches in diameter. One of the pandanus strips was left projecting for some inches to form a handle. The game was played by a single child who held the pandanus strip in one hand and batted the ball with the other, or by two children, one of whom held the strip while the other struck the ball. Pohutu were also used in the pei game, in which genealogies were repeated. The pei game as described by Handy, suggests a close resemblance between the pohutu and the well known poi balls used by the Maori.¹⁶¹

23. Checkers or Ko-na-ne .
Classification.F,SP:s,c*.

In Hawaii, the game of ko-na-ne appears to be very old and Buck wrote the following concerning its authenticity:

The game of konane (checkers) was played on a board (papa konane) with rows of places for two sets of men, black and white. Any doubt as to its authenticity as an old Hawaiian game is dispelled by the fact that it was being played at the time of Cook's third voyage. King, (Cook, 1784, Vol.3, pp.144-145) described the game as resembling draughts and played on a board 2 feet long with 238 squares arranged in rows of 14. Black and white pebbles were moved from square to square. Ellis (1839,p.213) also describes the game as being played on a board about 2 feet long with "upwards of 200 squares, usually 14 in a row." The two descriptions of boards are practically identical, but there is a possibility that Ellis quoted from Cook as regards the details of the board.

A study of existing boards does not support any evidence of an established pattern. Each of the three ko'nane boards in the Bishop museum is 26 inches long, but the arrangement of holes representing the "squares" for the men differs considerably from that described by King and Ellis. The smallest board,

¹⁶¹Ralph Linton, "The Material Culture of the Marquesas Islands, Memoirs of the B.P. Bishop Museum, Vol.8., No.5 (Honolulu: Bishop Museum Press, 1923), p.388.

with small holes filled with white coral has ten rows which alternate seven and six holes, making the low total of 65 places. In this board, the central hole is inlaid with a human molar tooth, the crown flush with the board surface [the second and third boards have 180 holes]....

Sets of konane holes were also made on slabs of lava and flat pieces of basaltic rock. Nine specimens in Bishop Museum range in length from 15.5 to 32.5 inches, in width from 10 to 21 inches, and in thickness from 3.2 to 7.5 inches. One slab is limestone. In many the holes were worn down by previous exposure to the weather. The normal holes are about 0.5 inch in diameter and about 0.2 inch deep. The spacing between holes is fairly regular in each slab but varies in the series from 1.0 to 1.6 inches. In a few the alignment of rows is irregular.

Emory (1924, p.84) counted the rows and holes in 14 konane stone slabs on the island of Lanai. The number of pits in each row ranged from 8 to 13, and the rows, from 8 to 15. In 12 slabs the total number of pits ranged from 64 to 195; and in the other two they totalled 225 and 260 respectively.... The variability in the number of rows and holes indicates conclusively that there was no established number of rows and holes for the konane boards, and evidently the playing of the game was not affected by changes in the boards. Apparently any increase in the size of the board merely influenced the length of the game. Ellis (1839, p.213) states that konane was a favorite game of the old men and cites a game which started in the morning and barely finished before the end of the day.

The men used in the game consisted of small black and white pebbles termed 'ili'ele'ele (black skinned) and 'ili kea (white skinned). The black pebbles were formed of close-grained basalt and the white pebbles, of pieces of branching coral. Both were ground to the requisite size and polished by the constant action of the waves....

An alternative name for the game was mu and for the board, papamu....¹⁶²

Culin also gave a good account of the game in which he quotes several authors:

According to Brigham (Preliminary Catalogue, part II, p.60), a game "played on a flat surface of stone or wood, and somewhat resembling 'fox and geese' or Japanese gobang (go). Positions on the pa-pa-mu were marked by a slight depression on stone and often by the insertion of bone, usually chicken (sometimes human), in wood. There seems no definite number of places or arrangement. Beach-worn pebbles - coral for white, lava for black - completed the equipment."

In his journal of Cook's voyage to the Pacific Ocean (1784, Vol.III, p.144). Captain King says: "They have a game very much like our draughts; but if one may judge from the number of squares, it is much more intricate...."¹⁶³

Corney¹⁶⁴ said: "Their national game is draughts, but instead of having twelve men each, they have about forty; the board is painted in squares, with black and white stones for men, and the game is decided by one party losing all his pieces."

Bryan suggested that there were many ways of playing Konane and he wrote:

¹⁶²Buck, (Arts and Crafts in Hawaii), op.cit., pp.269-72.

¹⁶³Culin, op.cit., pp.243-4.

¹⁶⁴Corney, op.cit., p.106.

Konane, a game suggestive of checkers, but also resembling the Japanese game of "go", was played with black and white pebbles on a wooden slab or stone (papamu), laid off in rows of squares. There seem to have been many ways of playing: various methods of jumping on a papamu entirely filled with stones, alternating in color, or the successive placing of stones on the board in various patterns.¹⁶⁵

Malo¹⁶⁶ also suggested another method of playing: "The game consists in moving one's pieces in such a way as to compel the opponent to take them." Both Alexander¹⁶⁷ and Mitchell¹⁶⁸ also made reference to the game and gave descriptions similar to those already given.

Culin described another variation of the game as Ma-nu:

Played on a diagram cut on a stone, consisting of four rectangles placed around a square to form a cross, the squares all being crossed with intersecting lines, [see diagram below]. Thirteen stones (pa-ka) are arranged as shown. One of the two players, called pu-ni-pe-ki, points with a stick (la-au) to one of the unoccupied points. The stones move one square at a time and endeavor to pen up the pu-ni-pe-ki, who in turn tries to capture the stones. The stick moves one square and jumps over an adjacent piece when the next square beyond is vacant. The player then cries, Pe-pe-hi! When the stick is cornered the opponent cries, Paa! ("tight").¹⁶⁹

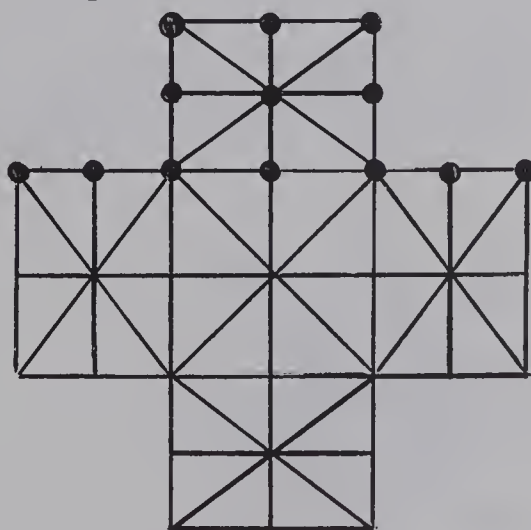


Figure 10.

¹⁶⁵ Bryan, op.cit., pp.50-1.

¹⁶⁶ Malo, op.cit., p.234.

¹⁶⁸ Mitchell, op.cit., pp.22-3.

¹⁶⁷ Alexander, op.cit., p.90.

¹⁶⁹ Culin, op.cit., pp.244-5.

The Maoris had a similar game to Konane called mu-torere and Buck gave the following description:

The mu-torere board was made of a hewn slab marked with charcoal in a diagram with a central circle (putahi) and eight evenly spread radials [see diagram below] termed kawai after the tentacles of an octopus which the figure was supposed to represent.

Another form of board was made of the inner bark of the totara, the inner side of which was marked with the diagram while green, the marks remaining permanent when the bark dried. Straight sticks were tied on either side of each end to prevent curling. Temporary diagrams were marked on the ground with a pointed stick. The men (perepere) consisted of two sets of four pebbles marked to distinguish the two sets.

The game was played by two players. The men are placed on the ends of the radials, White having 1 to 4 and Black, 5 to 8. Moves may be made from a radial to the centre (putahi), from the centre to an unoccupied radial, and from a radial direct to an adjoining radial when it is unoccupied. However, a man cannot be moved to the centre unless it adjoins a radial occupied by an opponent's man. Thus if Black opens the game, he may move 5 or 8 to the centre but not 6 or 7 as that would block the game in one move.¹⁷⁰

Best gave the following as a specimen game:

Black opens with 5 to the centre and White moves 4 to 5.
Black moves centre to 4 and White moves 3 to centre.
Black moves 4 to 3 and White moves centre to 3.
Black moves 3 to centre and White moves 2 to 3.
Black moves centre to 2 and White moves 4 to centre.
Black cannot move and White wins.¹⁷¹

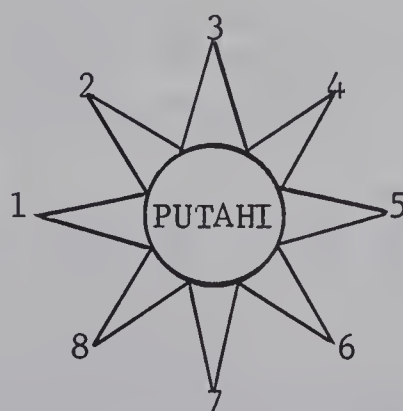


Figure 11.

¹⁷⁰ Buck, (The Coming of the Maori), op.cit., pp.244-5.

¹⁷¹ Best, op.cit., p.61.



Figure 12.
Wooden table and men used in the game of checkers.
(Refer page 50)

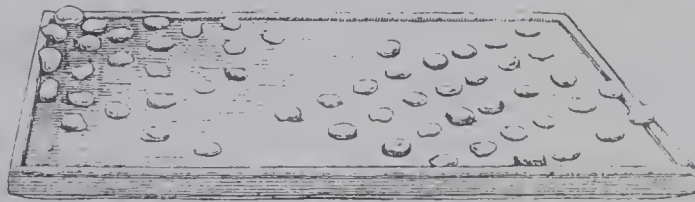


Figure 13.
Drawing of a checkers board.
(Refer page 50)

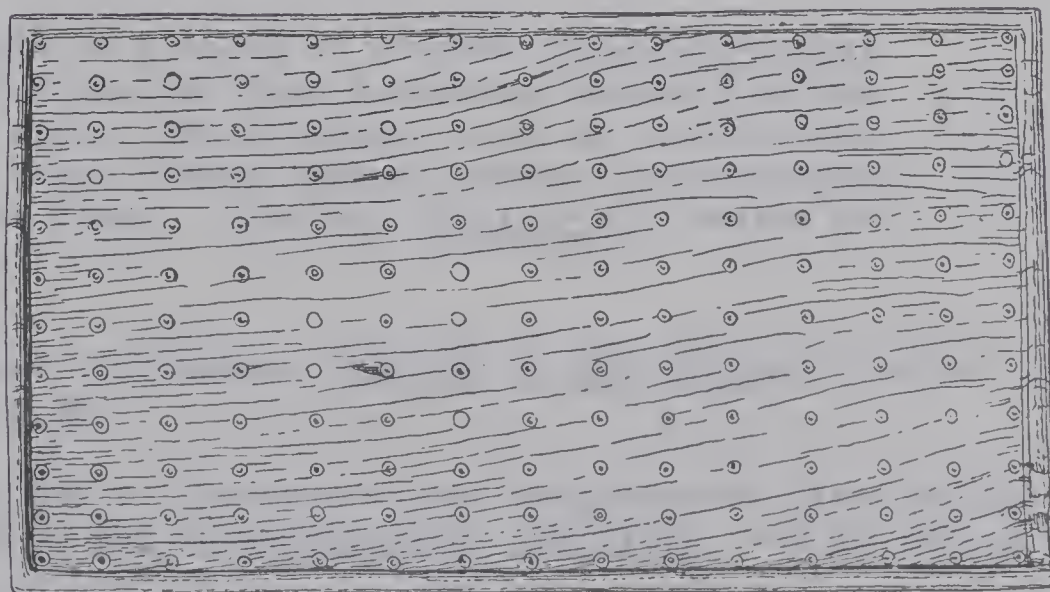


Figure 14.
Board used for checkers.
(Refer page 50)

Dieffenbach¹⁷² also made reference to this Maori game, while Tylor¹⁷³ described the presence of konane in Hawaii and e'mu in New Zealand.

In Samoa, Churchill described a game similar to checkers as:

For evenings and rainy days there are indoor games. One of these is somewhat after the nature of checkers. The common mats which cover the floors of the Samoan houses are woven in squares an inch each way. These mats afford a satisfactory substitute for a board on which to play. The boards are not composed of the squares of eight as in the familiar game, but are oblongs without an apparently fixed number of squares. Several games showed the employment of a board twelve squares long and six across, the players placing two rows of counters at the long sides, advancing a single square at a time under all circumstances, and not jumping when capturing a piece.¹⁷⁴

In the Society Islands, Handy¹⁷⁵ stated that "the pitted slabs used in the game of konane were not found on Kauai, though doubtless the game was played there."

24. Draughts or Moo.
Classification.F,SP:s,c*

Moo could have been a variation of konane or even an early European - introduced game, but Culin wrote that in Hawaii it was an established pre-European game. He described it as:

Played on a board or diagram (pa-pa-ko-na-ne) of 8 by 8 squares [see following diagram] cut on a flat stone, the alternate squares on which the pieces are placed being marked with crossed diagonal lines. The men (i-li-i-li), twelve on

¹⁷²Ernest Dieffenbach, Travels in New Zealand (London: John Murray, 1943), p.58.

¹⁷³E.B. Tylor, "Remarks on the Geographical Distribution of Games", Journal of the Anthropological Institute, Vol.IX, 1879, p.27.

¹⁷⁴Churchill, op.cit., p.567.

¹⁷⁵Handy, (Polynesian Religion), op.cit., p.78.

each side, consisted of red pebbles (i-li-i-li. u-la) and black pebbles (i-li-i-li e-le-e-le), which are placed on the marked squares.

The play is identical with our game of draughts, except that a king (a-li-i, "chief") can move or jump any number of squares, like the queen in chess. There are little holes, lu-a, in the center of the marked squares to hold the stones. A king, or a-li-i, is made by putting two stones in a hole. The squares are called ha-le, "houses".

The game above described, which was communicated to me by the four natives [informants], is not mentioned by the name of moo in Andrews' Hawaiian Dictionary. It exactly agrees in the king's move¹⁷⁶ with the game of dama or draughts played in the Philippine islands; differing in the men being placed within the squares instead of at the intersection of the lines.¹⁷⁷

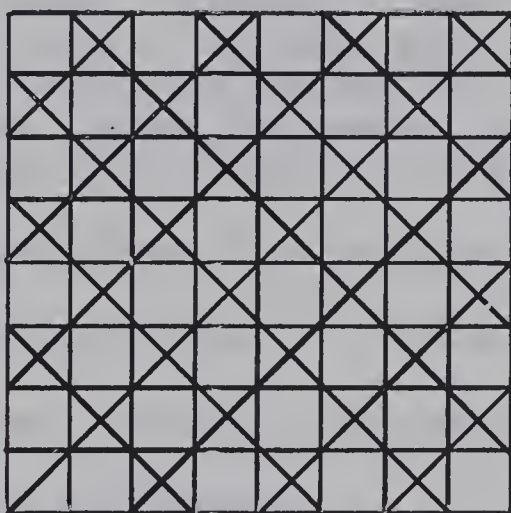


Figure 15.

In New Zealand, Tregear¹⁷⁸ wrote that the Maori game of "draughts or checkers (mu) were well known to the Maoris before the Europeans came and were skilfully handled although the game differed somewhat from our own." Dieffenbach¹⁷⁹ also referred to this game of E'mu which was similar to draughts and notes that it was "not played for gambling but often gives rise to quarrels."

¹⁷⁶The same as in Polish draughts.

¹⁷⁷Culin, op.cit., p.244.

¹⁷⁸Tregear, op.cit., p.59.

¹⁷⁹Dieffenbach, loc.cit.

25. Hand Betting or Pi-li-li-ma.
Classification.E,SP:c,s,d.

Described on page 30 in Activities with Chance Characteristics.

26. Hide and Seek or Pe'epe'e-akua
Classification. SP,P:p,s.

Described on page 26 in Activities with Pursuit Characteristics.

D. ACTIVITIES AND GAMES WITH DEXTERITY CHARACTERISTICS.

27. Jumping Rope or Ko-wa-li.
Classification.SP:d,v.

In Hawaii, Culin described the game or activity as follows:

The rope may be swung by two persons, by one person with the other end fastened, or by one person who also jumps. Two girls frequently jump together counting until they miss. Andrews gives pu-he-o-he-o as "a sport of children like jumping the rope." Ko-wa-li, the term given by my informants, is the name of the convolvulus, the vine of which is used as a rope.¹⁸⁰

Bryan¹⁸¹ also mentioned "rope skipping or lele koali", as being "strictly a children's game." In Fiji, L. Thompson¹⁸² also described "rope jump" as a children's amusement.

28. Head Standing or Hu-al-a-poo.
Classification.SP:d,v.

In Hawaii, Culin¹⁸³ stated that: "Head Standing - turning somersaults is a common pastime of boys.: He also described another gymnastic event called "le-le-le-la-au or stick-jumping, vaulting- it is practiced with the aid of a long pole."¹⁸⁴

¹⁸⁰Culin, op.cit., p.205.

¹⁸¹Bryan, op.cit., p.51.

¹⁸²L.Thompson, loc.cit.

¹⁸³Culin, op.cit., p.207.

¹⁸⁴Ibid., p.211.

The Maori practiced a similar activity to this vaulting and Buck¹⁸⁵ described it as: "A pole was sometimes used in vaulting (tutoko) on the flat or over a stream but never for height over a bar."

29. See-Saw or Ma-hi-ki.
Classification.SP,C:d,v.

Culin¹⁸⁶ stated that in Hawaii: "this is commonly played by girls, who sit astride a board. Two or three sit on each side with two boys standing back to back in the middle." Wilkes stated:

They had likewise the amusement of see-saw, which has not yet gone out of fashion, and is performed in a manner somewhat different from ours. A forked post is placed in the ground; on this a long pole is placed, which admits several on each side. After two or three ups and downs, they try [to see] which shall give the opposite party a tumble. This is, at times, adroitly done, and down they all fall, to the infinite amusement both of their adversaries and the bystanders, who indulge in loud laughter and merriment at the expense of those who are so unlucky as to get hurt.¹⁸⁷

Tregear¹⁸⁸ described the Maori game of piori or tiemi as see-saw and stated that it was "often played on the elastic branch of a growing tree."

30. Long Breath Holding or Aho loa.
Classification.E,P,SP:d,ex.

In Hawaii, Mitchell¹⁸⁹ described the activity as: "Divers vie to see who can hold their breath the longest underwater."

Luomela gave the following account:

¹⁸⁵Buck, (The Coming of the Maori), op.cit., p.240.

¹⁸⁶Culin, op.cit., p.206.

¹⁸⁷Charles Wilkes, U.S.N. Narrative of the U.S. Exploring Expedition During the Years 1833-1842 (Philadelphia, 1845), p.47.

¹⁸⁸Tregear, op.cit., p.57.

¹⁸⁹Mitchell, op.cit., p.3.



Figure 16.
Holua slide at South Kona - start of speedway.
(Refer page 62)



Figure 17.
Palm leaf used as a child's sled. (Refer page 62)

wearied jerk the stone from and rise to the surface."

31. Sledge Sliding or Hwe-ho-lu-a.
Classification.C,P,SP:d,ex.

In Hawaii, Malo described "haua sledding" as:

Sliding down hill on the holua sled was a sport greatly in vogue among chiefs and people, and one on the issue of which they were very fond of making bets, when the fit took them.

The holua was a long course laid out down the steep incline of a hill and extending onto the level plain. Rocks were first laid down, then earth was put on and beaten hard; lastly the whole was layered with grass, and this was the track for the holua sled to run on.

The runners of the holua sled were made of mamane or of uhiuhi wood, chamfered to a narrow edge below, with the forward end turned up so as not to dig into the ground, and connected with each other by means of cross pieces in a manner similar to the joining of a double canoe.

On top of the cross pieces, boards were then laid, as in flooring the pola of a canoe. This done and the runners lubricated with oil of the kukui nut, the sled was ready for use.

The bets having been arranged, the racers took their stations at the head of the track; the man who was ranged in front gave his sled a push to start it and mounted it, whereupon his competitor, who was to his rear, likewise started his sled and followed after. He who made the longest run was the victor. In case both contestants travelled the length of the course, it was a dead heat and did not decide who was victor.

The victory was declared for the player who made the best run.¹⁹³

Best described the sled and other facets of the sport as follows:

¹⁹³ Malo, op.cit., pp.224-5.

Sliding down a hillside on some object which prevented abrasion of the skin was common throughout Polynesia and New Zealand. The simplest form of sled was the leaf-head cluster of a ti plant with part of the stalk. The individual sat on the leaves and held the stalk which was passed forward between the legs. This form of ti-leaf sled was used by boys in Hawaii, but adults developed the pastime into the aristocratic game known as holua, which called for a highly specialized sled and carefully constructed runways. Traces of old runways are to be seen throughout the islands; but the wooden sleds have vanished, save for one sled and some runners preserved in the Bishop Museum.

The complete sled in the Museum is old. Some wornout lashings have been replaced with trade string, and others are missing. Also the matting cover has decayed in parts, but enough remains to indicate the original construction of the sled.

The runners are 11 feet 6 inches long and their width or depth at the front holes is 2.3 inches; in the middle, 2.3 inches; and at the aft end 2 inches. The maximum thickness at these three points is 1 inch, 1.1 inches, and 0.6 inch, whereas the thickness at the upper edge at the same points is 0.6, 0.6 and 0.4 inch respectively. The lower edge is rounded off for smooth running.

[Buck goes on to give a long and detailed description of the construction of a sled]....

The sledding track (kahua holua), was made on the side of a hill by building up rocks for the foundation and then covering them with earth which was beaten down hard to form a level sloping surface. When in use, the surface was covered with grass to facilitate the smooth running of the sled. The track was narrow with room for only one sled at a time, and it ran out onto the plain below. The length of the track depended upon the length of the slope of the selected hill. [The picture of a track at Puu Hinahina, South Kona, Hawaii, shown in Figure 16, gives some idea of the construction.]¹⁹⁴

¹⁹⁴Buck, (Arts and Crafts of Hawaii), op.cit., pp.379-83.

Of the actual sledding technique, Ellis wrote:

The person about to slide grasped the sled firmly by the right hand grip, ran a few yards to the starting place, grasped the other hand grip with the left hand, threw himself forward with all his strength, falling flat on the sled, and slid down the hill. His hands retaining their hold on the hand grips, and his feet were braced against the last cross piece on the rear end of the sled. Much practice and skill were necessary to keep an even balance. An expert could slide with velocity and apparent ease for 150 or 200 yards down the gradual slope of the hill, and the velocity carried the sled for some distance along the flat at the end of the descent. In competitions, the sled that went the farthest won. The tracks were too narrow to admit of racing to a side by side start or to allow of one sled passing another.¹⁹⁵

Culin described a variation with respect to the number of people riding the sled which he described as follows:

Two persons, stretched at full length, slide together head first down the hill on a smooth board (ho-lu-a). Several often compete, the one down first winning a prize.¹⁹⁶

Brigham gave an excellent description of the holua or track and the construction of the sled:

A most dangerous but fascinating sport of sliding down hill on a sled made for the purpose. The holua or track was built with great care on a hill-side, and the remains of one are plainly seen on the hill mauka of the Museum. Constructed of stone, when a hollow in the track needed filling, the holua was covered with earth well beaten down, and dry grass was spread over all, and a very slippery surface resulted. The sled, Papa holua was made of mamane [Edwardsia chrysophylla] or of whiuhi [Caesalpinia Kauaiensis]. Two long runners resembling skate irons were bound firmly to the upper stage 2½ inches apart from centres, the whole sled being some 11¼ feet long.

¹⁹⁵Ellis, op.cit., p.300.

¹⁹⁶Culin, op.cit., p.214.: The latter part of this quote does not seem feasible unless the race started at the foot of the hill and the two contestants had to race to the top before commencing their slide, in which case the first down would be the winner.

This papa was carefully oiled with kukui oil and the rider ran with the sled to gain impetus, and then threw himself headlong down the course. This was an eminently aristocratic game.¹⁹⁷

Fornander gave an interesting account of sledding and made reference to women riders:

The sled is a long piece of hewn board. The large boards are six yards long, and the smaller ones are some four and some three yards. Two long boards are laid on edge. Holes are made on the sides in the manner as those of a ladder with small sticks between. The width from one board to the other is nine inches. The heads of the boards are turned up like a plow, rubbed over with kuikui till they shine and glide easily. The time for sledding is mid-day and afternoon, and the place for sledding is [down] a small steep hill, like down the south side of Punchbowl, looking towards Waikiki, and dug up in ridge ways.

The length of the track is one and one half miles; some two miles. The dirt is laid down nicely and the track spread over with grass. When sliding down the track, if a man he has to fasten up his girdle securely, run back about five fathoms distant, and then run forward and lie down on the sled, sliding down, with his head to the front and eyes looking sharply. If he is not watchful, or his foot touches the ground, he would be thrown off the track, bruising his body with rocks or other things. If a woman is to slide down, she securely ties the loin-cloth around her waist, leaving the body bare, without clothing.¹⁹⁸

Alexander¹⁹⁹ gave similar information concerning sledding but stated the two runners were only "about four inches apart and fastened together by ten or more cross pieces, on which two long, tough sticks were fastened and connected by wicker-work."

¹⁹⁷William T. Brigham, A Preliminary Catalogue of B.P. Bishop Museum of Polynesian Ethnology and Natural History, Part II (Honolulu: Bishop Museum Press, 1892), p.56.

¹⁹⁸Fornander, op.cit., p.198. ¹⁹⁹Alexander, op.cit., p.90.

Bryan²⁰⁰ supported this statement by Alexander and described holua sledding as "the sport of kings. Hazardous but exhilarating must have been the ride down the steep, grass-covered, stone-paved holua slide on a low sled made of two long, narrow runners fastened only a few inches apart." Bolton²⁰¹ made reference to the activity and Pukui described some of the children's aspects of the activity as:

Sliding down sloping hillsides was a favorite sport with young and old in all walks of life. In the old days long wooden sleds (holua) were used for sliding. In my day when no sleds were to be had the stalk of the ti plant was broken off and the rider sat on the bunch of leaves at the top and steered by the stalk. Near the beach where ti did not grow coconut leaves were used, one leaf laid upon another to make the seat thick enough. Five or six could ride together on the coconut leaves, holding each other around the waist.²⁰²

In New Zealand, the Maoris practiced a form of sledding or tobogganning which Buck²⁰³ stated was not as "highly developed as in Hawaii." He described the activity as follows:

Tobogganing or sliding down a suitable hillside on some object to prevent skin abrasion was a pastime widely spread throughout Polynesia. The most available form of toboggan was a leaf head of the ti kouka (Cordyline australis) in New Zealand and the ti (Cordyline terminalis) in Polynesia. The Maori sometimes made a special toboggan of a wooden plank with the front end curved upwards.... The greatest development of tobogganing occurred in Hawaii where it was a chiefly pastime with special sleds made with two runners and special slides, the furrows of which are still to be seen. The usual Maori term for the sport was retireti and the board was termed papa retireti.

²⁰⁰Bryan, op.cit., p.50.

²⁰¹Bolton, op.cit., p.22.

²⁰²Pukui, op.cit., p.209.

²⁰³Buck, (The Coming of the Maori), op.cit., p.238.

Other terms such as panukunuku toreherehe, and horua were also used. In Hawaii, the term used was holua and hence the Maori term horua probably represents the old Polynesian form.²⁰⁴

Best gave a similar description as follows:

The reti or horua, a simple form of toboggan much patronized by young native folk in former times. A short piece of hewn plank served as a reti, having two projections to accommodate the feet, which were placed one behind the other. The slide was a steep hillside. Children used very simple substitutes for a board in some cases, one such being the head of a cabbage tree (Cordyline), and another a fan of flax (Phormium) leaves.²⁰⁵

Tregear also described tobogganing as a children's game:

The toboggan (papa retireti) was used by the youngsters and consisted of a small plank about three feet long and four inches wide, with ridges or rests for the feet, one foot being kept behind the other. These boards were used on a slide (retireti) constructed on a slope and kept wet.²⁰⁶

One aspect of sledding, although stated, has not been emphasised. This is the fact that it was generally considered to be a royal sport. Russell brought out this point in his description.

A spectacular Hawaiian sport was holua or sledding. This was a royal sport and very dangerous. The sled-ways were on hill sides and in places were elaborately built up with stones in such a way that they resembled a railway embankment. The surface of a stone track was earthed over and grassed so as to give a glossy surface. Oil too was spread over the lower section of the track to speed things up.

²⁰⁴Ibid., p.246.

²⁰⁵Best, op.cit., pp.152-3.

²⁰⁶Tregear, op.cit., p.58.



Figure 18.
Ancient holua sled in Bishop Museum. (Refer page 62)



Figure 19.
Drawing of holua sled. (Refer page 62)

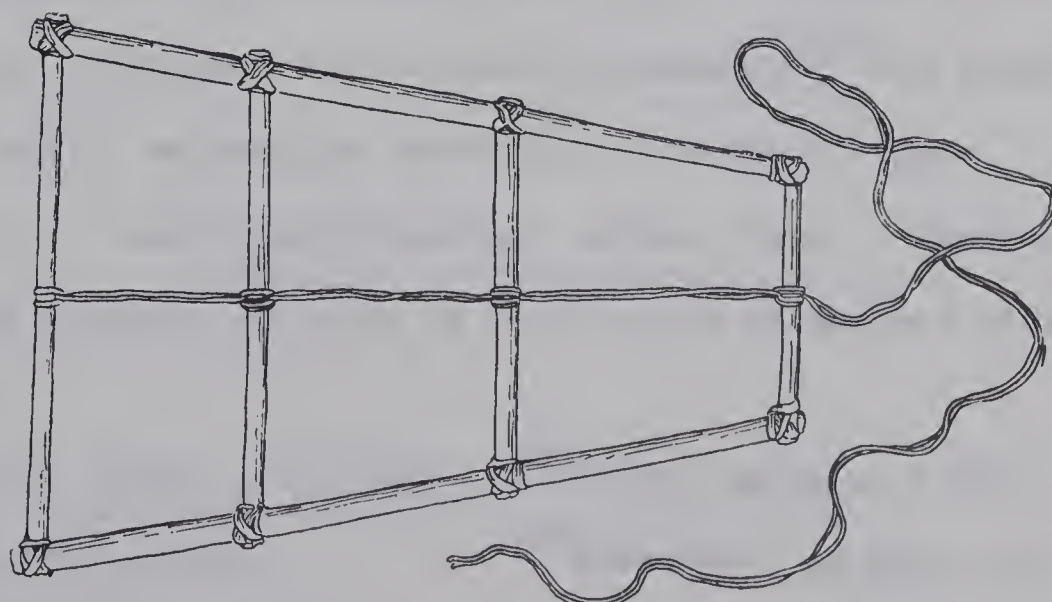


Figure 20.
Variation of holua sled. (Refer page 62)

The sled itself was anything from eleven to eighteen feet long. Grasping it in his hands a contestant rushed to the top of the sled-way and flung his sled and himself head first down the hill side. The first fraction of a second was highly important. In that time he had to get his feet on to the rear cross bar of the sled and his fingers firmly around the front bar. If he failed to do this he was done, for the sled was away at a terrific speed down the narrow track and had to be skilfully kept on its path. This demanded a man's whole attention from the word "go". The sled which covered the greatest distance over the flat ground at the foot of the sled-way was the winner. It was important therefore that at the top of the sled-way the contestants should throw themselves and their sledges down on to the track with all the strength they could muster.²⁰⁷

32. Stilts or Ku-ku-lu-a-e-o.
Classification. E,C,SP:d,v,ex.

In Hawaii, Culin described the activity as follows:

Walking or racing on stilts is a common amusement of men, boys, and girls. Andrews mentions o-he as timber suitable for making stilts, and gives ha-ka-ke, "to stand on stilts."²⁰⁸

Mitchell²⁰⁹ mentioned two variations of stilt activities in his "minor sports and pastimes for adults and in some cases for children" as "kukuluāe'o - walking on stilts of varying heights", and "kāhau - wrestling on stilts which are tied to feet and legs."

Unlike the previous two authors, Alexander²¹⁰ and Bryan²¹¹ both included stilt walking as "strictly a children's game," and made no mention of adults participating in any form. Handy made reference to this activity as being of a religious nature and stated:

²⁰⁷Russell, op.cit., pp.144-5. ²⁰⁸Culin, op.cit., p.216.

²⁰⁹Mitchell, loc.cit.

²¹⁰Alexander, op.cit., p.91.

²¹¹Bryan, op.cit., p.51.

Of the last of the three festivals for priests nothing is known except that a central feature of it was stilt walking, in which champions of different tribes contested with each other.²¹²

In Tahiti, Ellis described the activity as follows:

Walking on stilts was a favorite amusement with the youth of both sexes. The stilts were formed by nature and generally consisted of the straight branches of a tree, with a smaller branch projecting on one side. The bare feet were placed on this short branch, and thus, elevated about three feet from the ground, they pursued their pastime.²¹³

In New Zealand, Buck described the method employed by the Maoris as follows:

Stilts (pou toti, pou turu, pou koki, pou tokorangi) consisted of the shaft (pou) with a projecting foot-rest (teka) at varying heights above the lower end. The simplest stilts were made of a straight branch with a cut-off side branch to form the foot-rest. Others were made of a straight shaft to which a short piece was lashed at right angles to form the foot-rest and a cord attached to its outer end was carried obliquely upward to the shaft about a foot or so above the lashings of the foot-rest to the shaft. Stilts were used by children simply to walk about, to run races, or to cross streams. Young men had so-called wrestling matches in which tripping with the stilts was effective. Stilts reached their highest peak in the Marquesas where the foot-rests were carved. It is curious that the Maori carved the foot-rests of their digging implements (ko) and attached them to the shafts in much the same technique as the Marquesans used with their stilts.²¹⁴

Best also gave an excellent description of the Maoris' art of stilt walking when he wrote:

²¹²Handy, (Polynesian Religion), op.cit., p.260.

²¹³Ellis, op.cit., p.228.

²¹⁴Buck, (The Coming of the Maori), op.cit., p.246.

Another well-known pastime was stilt-walking, the stilt being as a rule a sapling of mako (Aristotelia), a light wood when dry. The foot rest might be an attached piece or the base of a branch. Stilts were known as pou toti, pou koki, and pou turu. Certain contests were held by youths and young men on these woewae rakau (wooden legs), such as races, crossing of rivers or ponds, and even a form of wrestling or overthrowing each other.²¹⁵

Tregear suggested that stilt walking was probably an old activity from another land and on this subject he wrote:

Walking on stilts (pouturu, poutok, pouraka, or poutoti) was often indulged in, and appears to have been a very ancient amusement; it is probably a relic of life in some other lands, as there is nothing in the circumstances surrounding the Maoris in their broken country to have caused the invention of stilts, while in large flat areas like those of the French Landes their use seems reasonable enough. The story of the stilts of Tama (used to allow him to steal fruit from trees) is unsatisfactory and the original purpose for which stilts were designed is not now to be traced.²¹⁶

In the Marquesas Islands, stilt activities apparently reached their highest development compared to other Polynesian societies. These activities were believed to have a religious significance, and Handy stated:

The sports that were enjoyed would furthermore stimulate the gods as they did men;... stilt-walking in the Marquesas, were sacred activities, and hence may properly be spoken of as religious elements in the festivals. In these and other sports it was probably thought that constantaneous [sic] response in nature was affected directly by the activity, movements, and expenditure of human energy.²¹⁷

²¹⁵Best, op.cit., p.152.

²¹⁶Tregear, op.cit., pp.53-4.

²¹⁷Handy, (Polynesian Religion), op.cit., p.307.

Culin wrote, in describing the activity, the following:

In the Marquesas Islands stilts were used, the foot-rests of which were highly carved. These rests were lashed to poles six feet in length which also were carved. Examples of these rests in the Museum of the University of Pennsylvania (Cat.No.18016) are carved, as is usual, with human figures.²¹⁸

Linton described this "highly carved" aspect in great detail, and some of his descriptions are as follows:

Marquesas stilts are made in two parts, a shaft and a step.... The shaft consists of a round pole of some light wood, usually fau, with a diameter of 2 to 3 inches and a length of 5 to 7 feet. In the best made specimens the upper end is carved into a rounded grip. The stilt shafts are carved with simple designs.

For convenience in description the step may be considered as having two parts, a long lower section, which rests against the shaft, and a projecting upper portion or foot rest. In an average specimen the lower section is $9\frac{1}{2}$ inches long, with a width of $1\frac{3}{4}$ inches at the upper end and one inch at the lower end. The inner side is slightly concave, to fit the stilt shaft, the concavity being deepest at the top. The foot rest in the shape of a broad hook, with a strongly convex outer, and slightly convex inner surface, and a rounded end.

In the commonest type of ancient stilt steps the space between the lower section and the foot rest is bridged by a small human figure, its buttocks and legs carved in high relief upon the lower section, while its head rests against the foot rest....

There were a number of variations from this form of step. Two figures carved back to back were often used with their sides against the step, or two figures were placed one above the other, the lowest carved in high relief, while the body of the upper figure was in the round. In this design the upper figure was frequently represented as kneeling....

²¹⁸ Culin, op.cit., p.216.



Figure 21.
On the left - a pair of
stilts used in the Marquesas
Islands. (Refer page 69)

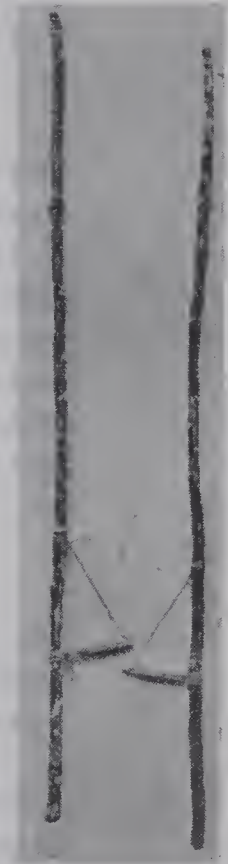


Figure 22.
Maori stilts
(Refer page 69)



Figure 23.
Maori stilts
(Refer page 69)

The step was attached to the shaft by sennit lashings passed around both, one set of these lashings covering the space behind the tiki figure while the second set of lashings encircled the step below it. The shaft was wrapped with tapa at the point where the step was attached.... The stilts were used in the ordinary European way, the instep of the foot resting against the shaft. The upper end of the shaft was grasped in the hand and lifted at each step.

The ancient Marquesans are said to have been unusually expert stilt walkers, running races over smooth pavements and engaging in knocking-down contests. Native boys now engage in these contests. The antagonists face one another and, balancing on one stilt, extend the other stilt and make a quick swinging blow at the bottom of the enemy's stilt, recovering instantly. The sport continues until one or the other falls.

In view of the mountainous nature of the country, and the lack of soft or even ground, it seems impossible that stilts could have been developed locally. They were used in Hawaii, the Society Islands and New Zealand, but do not appear to have been used in Samoa or Tonga. It seems save, therefore, to consider them as a feature of the marginal, as opposed to the western Polynesian culture.²¹⁹

In Niue, Loeb²²⁰ stated, "although stilt walking was a common Polynesian sport, I was informed that it was not done in Niue until recent times."

33. Hand Rubbing or O-lo-lo.
Classification.SP:d,ex.

Culin described this activity, and another called hu-i-la-ma-ka-ni, which appear to be both simple children's games:

²¹⁹Linton, op.cit., pp. 386-7.

²²⁰Loeb, loc.cit.

"Rubbing" - the feat of rubbing one thigh with the right hand and patting the other with the left.

Hu-i-la-ma-ka-ni - the feat of describing opposing circles with the hands and arms.²²¹

34. Humming Tops or Hu-o-e-o-e.
Classification.C,S:d,ex.

In Hawaii, Mitchell²²² described tops (Hū) as an activity which "may be played indoors, some were traditionally played by the light of the kuikui lamps on mats in large houses or enclosures." He described "Hū - tops of kukui nuts, spun by a bamboo peg or stem driven in the top of the kernal," and "Ho'niniu i ka hū - to spin a top." Culin described the activity as:

Humming tops are made of small gourds. Andrews gives o-ka, "a top made of a small gourd"; o-kaa, "a top", "to spin like a top"; u-li-li, "a small gourd used for a top to play with"; and o-ni-u, a top for spinning, a plaything for children, generally made of a cocoanut."

Hu-ko-a: Wooden or peg tops are so called from hu, top and ko-a (Acacia koa), the wood of which they are made. A top is put in the middle of a ring on the ground and the object of the game is to knock it out.²²³

Bryan²²⁴ described top (hu) spinning as a "strictly children's game," and Alexander²²⁵ also stated "the children had many games," one of which was "spinning tops made out of little gourds (hu)."

The Maori were very fond of playing with tops and Tregear described "the whipping-top" and gave a description of its use:

²²¹Culin, op.cit., p.217.

²²²Mitchell, op.cit., p.4.

²²³Culin, op.cit., p.221.

²²⁴Bryan, loc.cit.

²²⁵Alexander, loc.cit.

The whipping-top (potaka ta, kaitaka, kaihotaka, kaihora, etc) was a very common toy and is often mentioned in old legends. They were made of hard wood such as matai, or totara, and the lash of the whip was of native flax. Sometimes there was a point on each end of the top, so that its position could be reversed at will, this was called a double-ended-top (potaka-whereo-rua). They were often raced over little hurdles set up on purpose for them to jump over. The humming top (potaka-takiri) was also in use. It had the projecting piece at the top around which the string (Karure) could be wound, and the toy was held in position by a handle (papatakiri) made of a flat piece of wood about six inches long and half an inch wide; this was held against the side of the top. Pieces of paua - shells were often inlaid into the tops to ornament them. Sometimes a small gourd was used as a humming top; this would have a piece of wood projecting through its longest axis, for the point at one end and for a hold on which to wind the string at the other; a hole was also made in the side of the gourd to make it hum. One very singular custom relating to tops obtained in old days. If a battle had been lost and friends came to console with the defeated side, a dirge for the dead would be chanted and between each verse humming tops would be spun. It was supposed that the buzzing sound represented the wail for the victims of war. The tops and other presents were given to the visitors. The teetotum (porotiti) was made of a piece of rind of a gourd cut into a disc and having a wooden centre on which to spin when set whirling by a twirl from thumb and forefinger.²²⁶

Buck also gave an excellent description of the several different kinds of tops common to the Maoris. The following excerpts are given:

Tops (potaka) were used throughout Polynesia.... In New Zealand they were of two kinds, whip tops and humming tops. The woods used in their manufacture were preferably matai and heart of white pine (kahikatea) but other more common woods were also used.

²²⁶Tregear, op.cit., pp.52-3.

Whip tops were also made of stone and a top in the British Museum was made of pumice.... Some were ornamented on the flat top with an inlay of paua-shells and others were carved. Some were curved in towards the upper rim [Figure 26] and a curious form termed potaka wherorua or potaka kotorerua was double ended [Figure 26] Whip tops range in height from 3½ inches to 5 inches or more but very large tops were made by adults for community exercise.

The whip (ta,kare) was formed of a lash of strips of flax, tied to a handle, about 15 inches long. To spin the top, the lash was wound tightly around the upper circumference of the top and the handle pulled away quickly. The unwinding lash caused the top to revolve and to continue spinning as the point touched the ground.... Tops were spun on some cleared space termed a marae potaka or along a village street or path.... I was shown an overgrown path which ran straight between two old forts and was told that the people of one fort whipped a large top along the path to the other fort and then the other people whipped it back to the starting fort. This back and forward pastime continued until the participants grew weary....

The gourd top (potaka hue) was a specialized form of humming top. A medium-sized or small gourd was selected and holes made in the sides to extract the flesh and seeds. A stick was then passed through from the stalk end to the bottom, with enough projecting through at the bottom to form the spinning point with sufficient length above to form a shaft for the spinning cord. When the gourd was spun the holes in the sides produced a louder sound than the orthodox humming tops.²²⁷

Best²²⁸ described tops in New Zealand and he stated that "in spinning top contests the performers had sometimes to whip their tops over hurdles consisting of small ridges of earth," and that the chief use for humming tops was "in mourning for the dead."

²²⁷Buck, (The Coming of the Maori), op.cit., pp.246-8.

²²⁸Best, op.cit., p.155.

Dieffenbach²²⁹ also described the Maoris' use of tops.

In the Marquesas Islands Linton gave a short description of tops called niu, and stated:

They are still extensively made and used in the group. They are made of fau wood, an average specimen being 7 inches long and $2\frac{1}{2}$ inches in diameter, with a cylindrical body and pointed head. The shape is almost exactly that of an ordinary artillery shell. They are spun by means of a whip. This whip consists of a stick handle about one foot in length with a lash of fau bark $2\frac{1}{2}$ to 3 feet long, which is braided to within a few inches of the tip. Several boys usually play at tops at the same time, the winner being the one who can keep his top in motion the longest.²³⁰

In the Society Islands Handy²³¹ wrote "that there are a few other games in which stones were used," one of these he described as "a top, and is a piece of fine-grained, smooth, dark, basalt weighing 6 ounces. From the flat top, 1.3 inches in diameter, it tapers down quite symmetrically to a dull point with but a slight bulge at the sides. The length is 2.3 inches." In Niue, Loeb²³² stated that "the spinning of tops, was known in the olden times" and added: "After Mutalau had invaded the island from Tonga, he sat down and gossiped with the iki, Tihamau. While the two gossiped they spun (vili) the stick of Mutalau on top of a stone. According to this text, the spinning top was imported from Tonga." Russell²³³ stated that top spinning was a children's game in Tahiti.

²²⁹Dieffenbach, op.cit., p.32. ²³⁰Linton, op.cit., p.388.

²³¹Handy, (Society Islands), loc.cit.

²³²Loeb, loc.cit.

²³³Russell, op.cit., p.143.

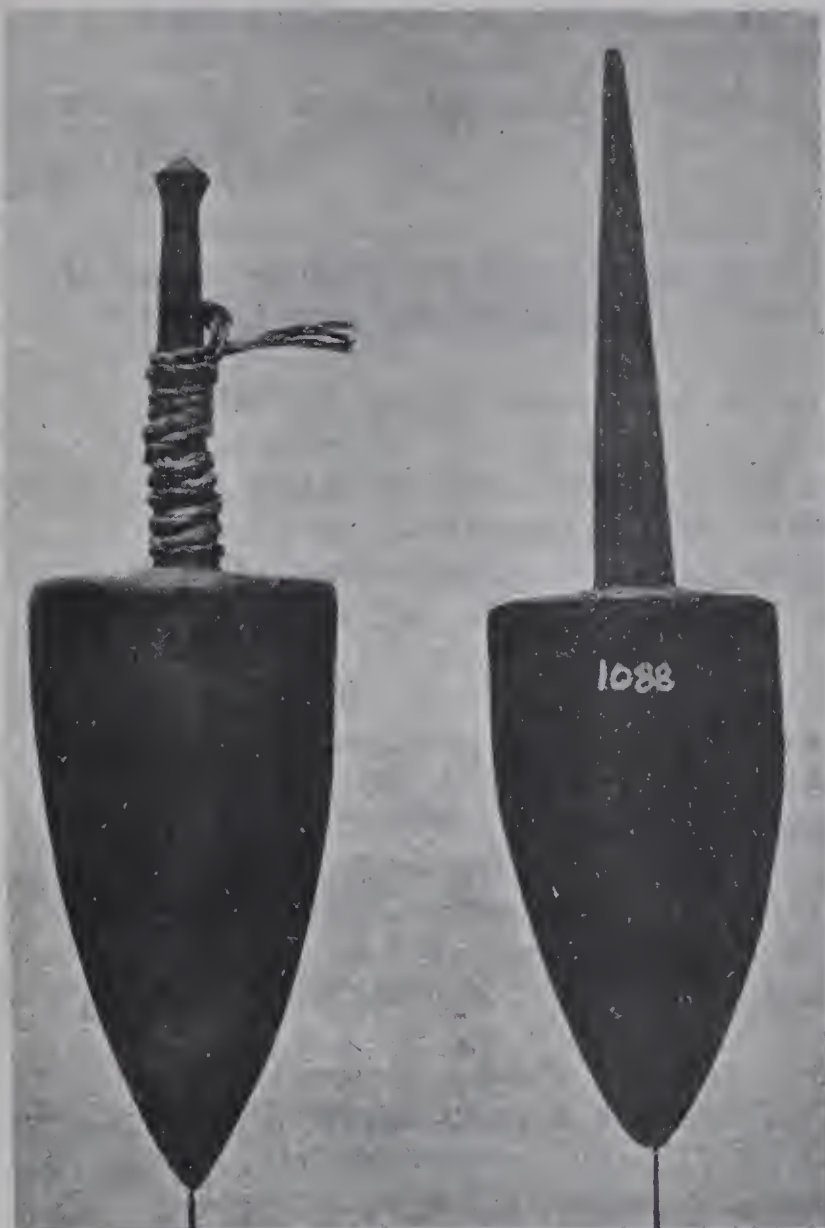


Figure 24.
Humming tops. (Refer page 75)

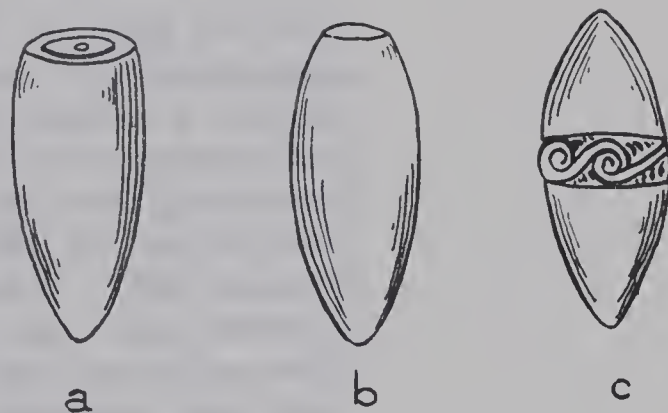


Figure 25.
Maori tops. (Refer page 75)



Figure 26.
Maori whip top.
(Refer page 75)

Haddon²³⁴ gave a brief description of tops and their occurrence not only in Polynesia but in many other parts of the world.

35. Cup and Ball or Hoo-lei-po-po.
Classification.SP:d,e.

In Hawaii, Culin described it as:

A ball (po-po) made out of rags of kapa is tied by a cord fastened to the middle of a stick about eight feet long, at the end of which a pocket (pa-ke-ke) is attached. The stick is grasped by the other end, and the object is to swing the ball and catch it in the pocket. Two or more play. When one misses, the next takes a turn. The maximum count is one hundred. There are two specimens in the Berlin Museum, one with a kapa and the other with a coconut ball. Another is figured in the Ethnological Album of the Pacific Islands, where it is described as consisting of a light wand of twisted leaf-ribs with a hoop at one end.

In Captain King's journal of Cook's voyage to the Pacific ocean [Vol.III, p.147.], he says that young Hawaiian children have a favorite amusement which shows no small degree of dexterity. They take a short stick, with a peg, sharpened at both ends, running through one extremity of it about an inch on each side; and throwing up a ball made of green leaves molded together, and secured with twine, they catch it on the point of the peg, and immediately throw it up again from the peg, they turn the stick around and thus keep catching it, on each peg alternately, without missing it, for a considerable time.²³⁵

Bryan²³⁶ described "cup and ball (palaie)" as a "strictly children's game." Buck also gave an excellent description of a variation called "ring and ball game" as follows:

²³⁴Alfred C. Haddon, The Study of Man (New York: G.P. Putnam's Sons, 1898), pp.208-9.

²³⁵Culin, op.cit., pp.226-7. ²³⁶Bryan, loc.cit.

The material used in one game consists of a handle with an open loop at one end and an oval ball of white tapa attached to the handle by a length of cord. The game was to toss the ball upwards within the limits of the length of string and catch it in the loop as it descended. This was repeated, and probably the objective was to see who could keep it going longest without missing the loop. The [Bishop] Museum contains two sets....

In one set the handle is a slender rod 50 inches long and 0.3 inch thick at its butt end. The rod consists of five pieces of interlaced vine forming a loop 4.8 inches long and 2.3 inches wide. The ends are tied to the thinner end of the handle with transverse turns of a two-ply cord. The ball consists of folds of tapa wrapped in oval form, 3.5 inches long and 1.75 inches in diameter at the middle. At one end the excess tapa is tightly tied to form the ball. The tuft of tapa beyond the tie is 2.2 inches long. A fine cord 25 inches long is tied to the untufted end of the ball and to the handle about 27 inches away from the butt end.²³⁷

Buck²³⁸ also gave a similar description of the "peg and ball game" described by Captain King in Culin's article. Mitchell gave a full description of the construction of the equipment used in pala'ie or the loop and ball game and also stated that "the object of this game is not merely to catch the ball in the loop, although this may provide enjoyment for younger children," but:

The real challenge comes from holding the handle horizontally and swinging the ball from the bottom of the loop to the top by describing a complete circle with the ball. With practice, this may be done 50 to 100 times without missing.²³⁹

Mitchell²⁴⁰ also stated that "a rhythm is set up which establishes the tempo for a pala'ie chant," which he described. In the Marquesas Islands, Linton described a "pin and ball game" as follows:

²³⁷Buck, (Arts and Crafts of Hawaii), op.cit., p.375.

²³⁸Ibid., p.376. ²³⁹Mitchell,op.cit., pp.16-7. ²⁴⁰Ibid.,p.17.

Under the title playthings may be mentioned one which consists of a stick about a foot long and an inch thick. A hole is bored in it at one end through which is run a peg five or six inches in length, and at the point of the peg is stuck a little ball of coco-thread. The stick is then struck with another, so that the ball is thrown up into the air. The game is to catch the ball upon the point of the peg. It is very probable that they have other objects of amusement of a similar kind, which may be ranged as playthings, but no others came under my observation.²⁴¹

36. Throwing a Pointed Object or Ku-he-le-mai.
Classification. SP:d,c*.

In Hawaii, Culin described this as:

A game played with an awl-shaped object, having a wooden handle pointed with a needle which is tossed from the hand, the object being to make it stand erect. The players play in turn, and each continues until he misses. The game is explained by Andrews as from Ku, "to rise," he-le, "to move," and mai, "this way."²⁴²

Pukui described a similar game called pahi'uhi'u as:

An old game played by some natives up to forty years ago. My mother told me how it was done. Each child broke off any slim branch that took his fancy, about eight or nine inches in length, stripped off the bark and rubbed one end back and forth on a flat stone until it was pointed, and smoothed the other end flat. The children threw the sticks at a distant point marked on the ground. The one whose stick reached the point and stood upright won the game. Sometimes contests were held between settlements and the best pahi'uhi'u players were selected to vie with each other.²⁴³

37. Pit Shooting or Pa-na-pa-na-lu-a.
Classification.SP:d,s*.

In Hawaii, Culin described the game, which in some instances is similar to marbles, as follows:

²⁴¹Linton, op.cit., p.388.

²⁴²Culin, op.cit., p.227.

²⁴³Pukui, op.cit., pp.207-8.

Played by several persons with beans, pa-pa-pa, each contributing the same number. A small hole is dug, beside which they put all their beans together. The first player then flips the beans into the hole, one by one, with his thumb and forefinger, continuing until he misses. The next then follows, and so on in turn until the beans are all flipped in the hole. The one who puts the last bean in wins the game.²⁴⁴

38. Seed Shooting, Marbles or Pa-na-pa-na-hu-a.
Classification.SP:d,s*.

In Hawaii, Culin stated:

The seeds of the ka-ka-lai-o-a plant (Caesalpinia bonducella), which are nearly spherical, are used as marbles. Any number play, and each puts the same number into a ring on the ground 10 to 12 feet in diameter. They shoot in turn from the edge of the ring, endeavoring to knock the marbles out. When a player knocks one out he may place his taw or shooter (ki-ni) in the ring. If a succeeding player who has not knocked a marble chances to hit this shooter he goes out of the game; but if he has knocked a marble out, the one whose shooter is hit forfeits the entire number he first put into the ring. The shooters, larger seeds, are valued at five times the ordinary ones which are called hu-a-ma-pa-la or hu a ki-ni-ki-ni, hu-a meaning seed. The game is said to be called also le-na-pa-ka (le-na, "to shoot"; pa-ka, "to fight").²⁴⁵

Bolton, described the seeds used as marbles in the following:

I confess to surprise at learning that even children's marbles grow on shrubs. I saw boys playing with the hard, almost spherical seeds of the Kakalaioa plant (Caesalpinia bonducella). The name of the plant signifies thorny and is singularly appropriate; it grows in rocky places in the lowlands. The seed pods, which grow on long stalks, are thickly covered with sharp spines something like a chestnut burr. They are first green, then brown, and when ripe almost black, and grow in bunches of eight to thirteen.

²⁴⁴Culin, op.cit., pp.227-8.

²⁴⁵Ibid., pp.229-30.

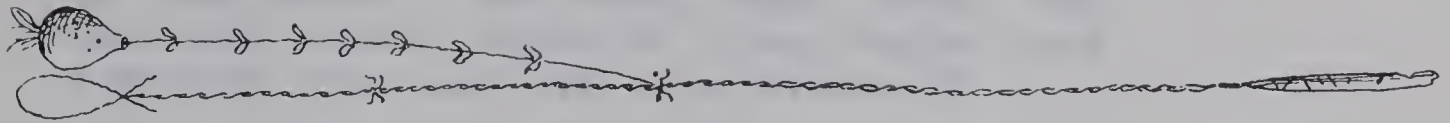


Figure 27.
Cup and ball game. (Refer page 80)

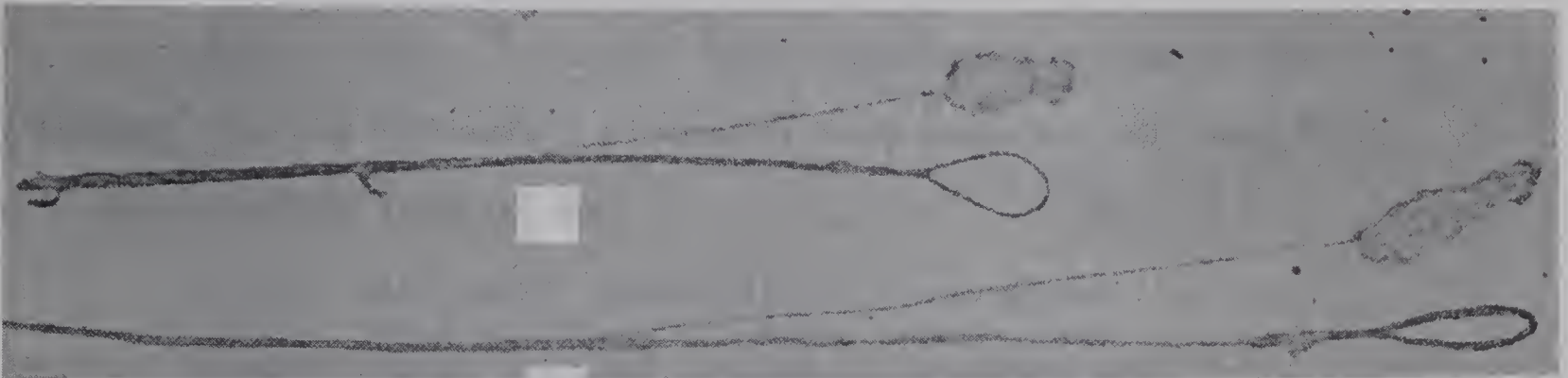


Figure 28.
Loop and ball game. (Refer page 80)



Figure 29.
Hawaiian girl juggling oranges. (Refer page 85)

Each pod has one or two seeds, stony hard and of lead color. The seeds, when dried, are very tough, and, shaken in a bag, rattle with a metallic sound much like true marbles.²⁴⁶

In Fiji, both L. Thompson²⁴⁷ and Geddes²⁴⁸ described the game of marbles as being strictly for children while the latter described the use of rounded nuts for marbles.

39. Juggling or Ki-o-la-o-la.
Classification.SP:d.

In Hawaii, Bryan²⁴⁹ stated that juggling was one of the activities that was "generally enjoyed by both sexes and all ages." Culin described the activity as:

A play with small stone balls by one person who keeps three in the air at the same time.

Captain King [Vol.III., p.147.] ; speaking of a game with a ball of green leaves, says: "They are not less expert at another game of the same nature, tossing up in the air and catching in their turn a number of these balls; so that we frequently saw little children thus keep in motion five at a time. With this latter play the young people likewise divert themselves at the Friendly Islands."²⁵⁰

Malo²⁵¹ described juggling as pukaula and said it "was a great betting game." The activity he described was not similar to that outlined by Bryan and Culin previously. This activity was a type of rope trick practiced by old men in which a knot was tied in a piece of braided rope and the ends pulled out. If the knot remained the juggler lost, but if it pulled out the juggler won.

²⁴⁶ Bolton, op.cit., p.25.

²⁴⁷ L.Thompson, loc.cit.

²⁴⁸ Geddes, loc.cit.

²⁴⁹ Bryan, loc.cit.

²⁵⁰ Culin, op.cit., p.228.

²⁵¹ Malo, op.cit., pp.226-9.

Malo²⁵² stated that the "outsider stood no chance of winning from the sleight-of-hand performer," and that the people were addicted to this type of betting.

Russell²⁵³ stated that in Tahiti "juggling was for the ladies," and that "they were experts, the best of them keeping eight balls in the air at once." He described a game of juggling as:

They juggled with green kukui nuts, that is candletree nuts. A group would sit in a circle and as a woman dropped a ball she pulled out of the game. The winner was the one who was still juggling on when the last of her opponents dropped a nut.²⁵⁴

In Samoa, Stair described juggling or O Fuanga as:

Throwing up a number of oranges into the air, six, seven, or eight, and the object was to keep the whole number in motion at once, as the Chinese jugglers do their balls. O le Tegunga was also played with a number of oranges, but in this game they were thrown up backwards.²⁵⁵

Turner²⁵⁶ also described it as "tossing up oranges and keeping three, four, or more of them on the move."

40. Jackstones, Knucklebones or Ki-mo-ki-mo.
Classification.S,SP:d,e.

In Hawaii, Pukui described one game as being "similar to jack-stones" and that it was popular with the "kinsfolk". She described the activity as:

It was played with pebbles, one stone in the player's hand called the kimo and the stones to be picked up from the ground the ai or "food." Two or more players sit facing each other with as many pebbles as desired before them.

²⁵²Ibid. p.226.

²⁵³Russell, loc.cit.

²⁵⁴Ibid. ²⁵⁵Stair, op.cit.,p.138. ²⁵⁶Turner,op.cit.,p.217.

Each player selects his kimo. This he tosses into the air, picks up a pebble from the ground, and catches the pebble as it descends. If he fails to do so or to pick up one from the "food" pile, the next player takes his turn. The ai picked up become the property of the player. The game goes on until no ai remain. The other players lay their kimo before the last player who chants [a Hawaiian chant].

The player must toss his kimo, touch that of his opponent in time to his chanting, and at the word E-0! [the last word of the chant] pick up and catch his own kimo. Should he miss, he lays down his kimo for his opponent to "touch" and chant over.²⁵⁷

Mitchell gave a similar description of Kimokimo and stated it was "suitable for both sexes of all ages," and that: "Dignified chiefs played kimo in old Hawaii." He gave a variation in the method of ending the game which was slightly different from that of Pukui as:

The game may be declared finished and the ai counted to declare the winner [when all the ai are picked up].

However, if the players have agreed to do so before the game, they may prolong it by allowing the one who picks up the last pebble in the pile and is still eligible to play to move to his opponent's pile of winnings and play for them. This can continue until one player has earned all of the ai from his opponent.²⁵⁸

Culin gave a slightly different method of playing and terminology as:

Played by two or more persons with a number of small stones (po-ha-ku). Each player has his own stone, called a-li-i, "chief". The game is practically identical with that played by children in the United States. The stones of all the players are placed on the ground;

²⁵⁷Pukui, op.cit., p.207.

²⁵⁸Mitchell, op.cit., pp.18-9.

one begins by tossing his stone up, grabbing the others, tossing them and catching them all together. He continues until he misses. It is employed for gambling purposes.²⁵⁹

Malo²⁶⁰, described "kimo or jack-stones, as a game in which the Hawaiian boy, and more especially the Hawaiian girl, excelled." Both Bryan²⁶¹ and Alexander²⁶² described it as strictly a children's game.

In Tahiti, Ellis gave timo or timotimo as another form of jack-stones, and described it as follows:

The parties sat on the ground, with a heap of stones by their side, held a small round stone in the right hand, which they threw several feet into the air, and, before it fell, took up one of the stones from the heap, which they held in the right hand till they caught that which they had thrown up, when they threw down the stone they had taken up, tossed the round stone again, and continued taking up a fresh stone every time they threw the small, round one into the air, until the whole heap was removed.²⁶³

In New Zealand, Buck described the Maori game of "Jackstones (ruru, koruru, kai makamaka, etc.)" and said it "is played throughout Polynesia and corresponds to the English game of knuckle bones."

It was played usually with five pebbles which were placed in various positions, one thrown up in the air, and the others picked up singly while one was in the air. There were various movements, each with its own name, the name being called as the player commenced the movement. One movement consisted of throwing up the five pebbles and catching all or as many as possible on the back of the hand. The various movements were in ordered

²⁵⁹Culin, op.cit., pp.228-9.

²⁶⁰Malo, op.cit., p.234.

²⁶¹Bryan, loc.cit.

²⁶²Alexander, loc.cit.

²⁶³Ellis, op.cit., p.308.

sequence and when a player failed in one of them, the opponent took over. The one who went furthest scored a point. If a player completed the sequence, a second sequence was commenced and carried on until a movement was missed.

This established the mark which the opponent strove to beat. A variation of the game consisted of using fifteen pebbles instead of five, a variation which is played in Samoa. The term ruru and koruru evidently applies to the action of bringing the stones together, kai applies to the stones, and makamaka refers to the action of throwing the stones into the air. The game required quickness of the eye and dexterity of hand to be successful.²⁶⁴

Tregear²⁶⁵ gave the number of different movements in the game as "eight", which had to be "successively attempted, some of them rather intricate." Best²⁶⁶ stated that the game "required a considerable amount of dexterity and long practice." He gave an interesting if not rather gruesome side of the game:

This game was a favourite with young folk, who would sometimes challenge the players of another hamlet to play a match. Children's hands were sometimes manipulated so that the stones could readily be caught on the back of the hand. This was effected by means of repeatedly pressing the fingers back.²⁶⁷

Dieffenbach²⁶⁸ also mentioned the game but called it tutukai.

In Samoa Wilkes stated:

Lafo Litupa is played by two persons, who place about 50 beans of the Mimosa scandium before them; then taking up four at a time, they throw them up in the air, and catch them on the back of their hand; the player who catches 100 soonest is the winner.²⁶⁹

²⁶⁴Buck, (The Coming of the Maori), op.cit., pp.241-2.

²⁶⁵Tregear, op.cit., pp.55-6. ²⁶⁶Best, op.cit., pp.142-3.

²⁶⁷Ibid. ²⁶⁸Dieffenbach, loc.cit. ²⁶⁹Wilkes, op.cit., p.136.

In Fiji, Williams²⁷⁰ described lavo as "a game at pitching the fruit of the walai (Mimosa scandens). The fruit is flat and circular, and from its resemblance in form to money is also called ai lavo."

41. Stick Casting or Ki-o-la-a-la-la-au.
Classification.SP:d.

In Hawaii, Culin described it in the following way:

Tip Cat is played with two sticks made of ko-a wood, one about 6 inches in length (la-au-po-ko-le, "short stick") placed so that its ends rest on the edges of a small hole scooped in the ground, and the other the bat (la-au hi-li, "striking stick," or (la-au lo-i-hi, "long stick"), which is longer. The cat is tossed by thrusting the bat beneath it and striking it in the air. The distance it falls is measured with the bat, and the one who thus first counts one hundred wins the game. The game is also called pa-a-ni la-au, from pa-a-ni, "to play", and la-au, "wood".²⁷¹

In Samoa, Stair²⁷² referred to "the English schoolboy's game of cat, but played in the water instead of on the land," as being a Samoan game.

42. Mice Shooting (Bow and Arrow) or Pa-ni-i-o-le.
Classification.C,E,P*:d,ex.

In Hawaii, Malo described it as:

Shooting mice with bow and arrow. This was a sport much practiced by kings and chiefs. It was the only use which the Hawaiians made of the bow and arrow. A place somewhat like a cock pit was arranged in which to shoot the mice.²⁷³

Alexander²⁷⁴ agreed with this statement and said it was also "connected with religious ceremonies."

²⁷⁰Williams and Calvert, op.cit., p.127.

²⁷¹Culin, op.cit., p.230.

²⁷²Stair, op.cit., p.139.

²⁷³Malo, op.cit., p.273.

²⁷⁴Alexander, loc.cit.

Culin²⁷⁵ stated "the bow was never used in war," only for the purpose stated by Malo and Alexander, but added: "The deified bones of the chiefs were generally carefully concealed in the most secret and inaccessible caves to prevent their being made into arrows to shoot mice with, or into fish-hooks."

Buck²⁷⁶ gave an excellent description of the bow and arrow but stated "apparently no great pains were taken in the making of bows, hence they were of little interest to early collectors," but he gave descriptions of one bow in the British Museum and two in the Bishop Museum. Buck also stated that "throughout Polynesia the bow and arrow were known and used mainly in sport for the killing of rats." In Samoa they were used for shooting birds and fish. In Mangareva, however, the native history records the use of the bow and arrow in war.

In Tahiti, Handy²⁷⁷ referred to archery as a sacred activity and "hence may properly be spoken of as a religious element in the festivals." Ellis²⁷⁸ also stated that "te-a, or archery, was a sacred game, more so, perhaps, than any other." He described in great detail the event and equipment used; the following are excerpts from the description:

²⁷⁵Culin, op.cit., p.233.

²⁷⁶Buck, (Arts and Crafts of Hawaii), op.cit., pp.276-7.

²⁷⁷Handy, (Polynesian Religion), loc.cit.

²⁷⁸Ellis, op.cit., p.299.

The bows, arrows, quiver, and cloth in which they were usually kept together, with the dresses worn by the archers, were all sacred, and under the special care of persons regularly appointed to keep them. It was usually practised as a most honourable recreation, between the residents of a place and their guests. The sport was generally followed either at the foot of a mountain, or on the sea-shore.... Before commencing the game, the parties repaired to the marae, and performed several ceremonies; after which, they put on the archers' dress, and proceeded to the place appointed. They did not shoot at a mark; it was therefore only a trial of strength. In the place to which they shot the arrows, two small white flags were displayed, between which the arrows were directed.

The bows were made of light, tough wood of the purau; and were, when unstrung, perfectly straight, about five feet long; an inch, or an inch and a quarter in diameter in the centre, but smaller at the ends.... The string was of romoha, or native flax; the arrows were made of small bamboo reeds, exceedingly light and durable. They were pointed with a piece of aito, or iron-wood, but were not barbed. Their arrows were not feathered; but, in order to their being firmly held while the string was drawn, the lower end was covered with a resinous gum from the breadfruit tree. The length of the arrows varied from two feet six inches, to three feet. The spot from which they were shot was considered sacred.... It was a stone pile, about three or four feet high, of a triangular form, one side of the angle being convex.

When the preparations were completed, the archer ascended this platform, and, kneeling on one knee, drew the string of the bow with the right hand, till the head of the arrow touched the centre of the bow, when it was discharged with great force. It was an effort of much strength in this position to draw the bowstring so far. The line often broke, and the bow flew from the archer's hand when the arrow was discharged. The distance to which it was shot, though various, was frequently three hundred yards. A number of men, from three to twelve, with small white flags in their hands, were stationed to watch the arrows in their fall. When those of one party went farther than those of the other, they waved the flags as a signal to those below. When they fall short, they held down their flags, but lifted up their foot, exclaiming, ua pau, beaten.

This was a sport held in the highest esteem, the king and chiefs usually attended to witness the exercise. As soon as the game was finished, the bow, with the quiver of arrows, was delivered to the charge of a proper: the archers repaired to the morae, and were obliged to exchange their dress, and bathe their persons, before they could take any refreshment, or even enter their dwellings....

The bow and arrow were never used by the Society Islanders, excepting in their amusements; hence, perhaps, their arrows, though pointed, were not barbed, and they did not shoot at a mark.... In the Friendly Islands, the bow was not only employed on occasions of festivity, but also used in war; this, however, may have arisen from their proximity to the Feejee [Fiji] Islands, where it is a general weapon.²⁷⁹

In Fiji, Stumpf and Cozens²⁸⁰ also gave reference to the fact that the bow and arrow was one of their "arms". Russell²⁸¹ stated that in Samoa and Tonga "hunting pigeons was a royal sport" and that "both nets and bows and arrows were used." He also stated that the Tongans had an elaborate method of hunting rats with the bow and arrow:

Before a game, attendants walked along a stretch of roadway blowing out finely chewed coconut as bait. Later followed the contestants in single file and in two teams. A man could fire his arrow at a rat only if it was abreast of him or behind him. Only the leading man of each party could shoot a rat ahead of him. As each man fired an arrow, he changed places with the man behind him. Each contestant carried only two arrows, attendants recovering each arrow after it was fired and returning it to its owner. Whichever team killed ten rats first won the match. Of course a further match would then begin.

²⁷⁹Ibid., pp.299-302.

²⁸⁰Stumpf and Cozens, (The Fijians), op.cit., p.7.

²⁸¹Russell, op.cit., p.146.

At cross roads, the bait spreaders stood up a tapu stick to prevent passers by from interrupting the game. These sticks would be removed by the last player as he passed.

At the end of an agreed course the original bait spreaders would have prepared kava and a sumptuous spread for the sportsmen. The food was collected from the neighbouring landowners who would have been warned beforehand that a royal hunting party was to enter their estates and would expect the usual hospitality.²⁸²

Russell²⁸³ also gave a similar description of the use of the bow and arrow in Tahiti as did Ellis and stated "Tahitian nobles preferred archery to hunting rats," and that "the Polynesian nobility hunted or played in an atmosphere of extreme politeness one to another. Each sportsman took the occasion to demonstrate to his fellow chiefs the high standard of his sportsmanship."

In Rotuma, Gardiner described the use of the bow and arrow as:

The shooting of a large rail, the kale (porphyriosmaragdinus, Temm.) was taboo to all except the chiefs. For it, it is stated that small bows and arrows were used. A captive kall was tied up in the middle of some open space in the woods, and around it the chiefs hid themselves in the trees. To some extent the captive bird was trained, but in any case it would attract other birds of its own species by its cries. The possession of a well trained bird always gave a chief a position of consequence among his fellows. The bows and arrows were, as far as I could find out, mere toys, and had no other use.²⁸⁴

²⁸²Ibid, p.147.

²⁸³Ibid., pp.147-9.

²⁸⁴Gardiner, loc.cit.



Figure 30.
Man from Nitendi, shooting the bow and arrow. (Refer page 90)

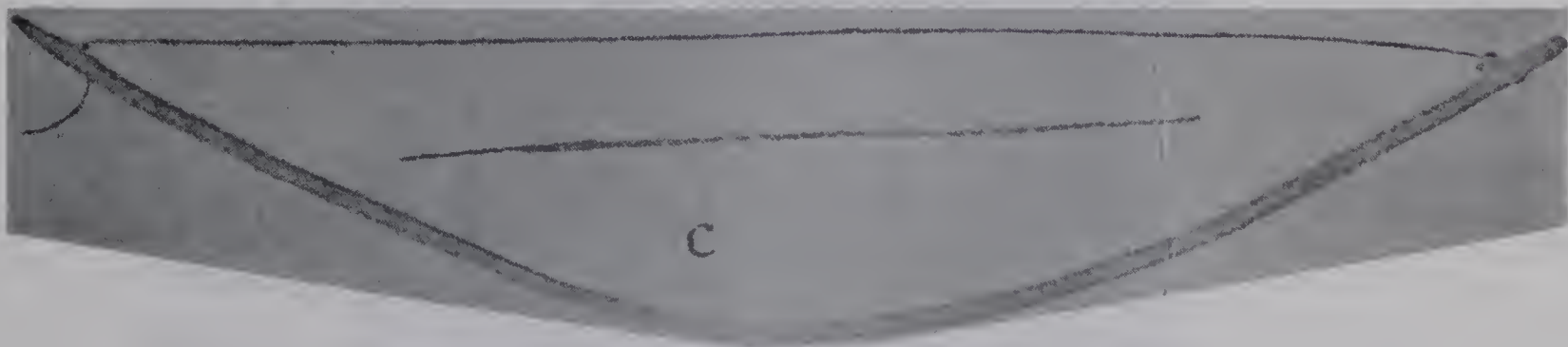


Figure 31.
Hawaiian bow and arrow. (Refer page 90)

In the Marquesas Islands, Linton wrote:

The bow, called pana, was not a weapon.... It was sometimes used to shoot shrimp, and po'oko, a small fish which frequents the rocks, but as these could be captured by other and much easier methods it seems probable that the shooting was a sport, and that the bow was only a toy.²⁸⁵

43. Spear Dodging or Mo-ko-mo-ko .
Classification.P,SP:D,ex.

In Hawaii, Culin described the activity as:

A national sport, practiced on holidays when village champions are opposed to each other. The contestants stand a certain distance apart and throw in succession seven spears, seven stones, seven stone axes with handles, and seven wooden knives, one at the other and then back again. If a player is hit he loses. The game is hazardous and exciting. Mo-ko-mo-ko is defined by Andrews as "to box; to fence; to fight; to hold boxing matches as pastimes or games."²⁸⁶

In New Zealand, Buck described a popular Maori activity as:

Spear throwing was a favourite pastime with the young. The spears were formed of the kakaho flower stalks of the toetoe raupo, straight stems of bracken fern (rarauhe), with the ends bound with flax, rods of light mako wood, and even manuka. The wooden spears were about 6 feet long with blunted ends. Opponents stood some distance apart, and one threw while the other avoided the missiles by dodging, parrying with a stick, or, as they became expert, by catching occasionally with the hand. Thus as they became older, spears could be discharged in quick succession, and the expert could sidestep one, parry a second, and catch a third with the left hand. Spears were also thrown at a mark to practice aim.²⁸⁷

²⁸⁵Linton, op.cit., pp.388-9.

²⁸⁶Culin, op.cit., pp.233-4.

²⁸⁷Buck, (The Coming of the Maori), op.cit., p.238.



Figure 32.
Spear throwing and the target in Tuamatu. (Refer page 96)



Figure 33.
Close-up of the target. (Refer page 96)

Stumpf and Cozens²⁸⁸ also wrote that for the Maori "along with art of thrusting the spear came instruction in the art of karo, that is, of parrying and dodging."

In Fiji, Williams and Calvert²⁸⁹ and B.Thompson both described an activity called veimoli which the latter described as:

Veimoli, or pelting with oranges, is played both by children and young men. The skill consists of dodging the orange, which is thrown at short distance and with full force, and their activity in dodging is so extraordinary that it has given rise to the myth that Fijians could avoid a bullet by dodging at the flash of the gun.²⁹⁰

Stumpf and Cozens²⁹¹ also described the use of spears as a weapon and stated that they used it with great dexterity.

In Samoa and Tonga, Russell wrote:

A popular variety of the game [throwing of spears and javelins] was to throw the spear at a man. He could either evade the spear by lightning movements of the body or he could parry the spear with a club. Rarotongans were particularly adept at evading the spear and often allowed six men to hurl spears at them in quick succession.²⁹²

44. Arrow and Spear Throwing or Ke-a-pu-a.
Classification.P,E:d,ex*.

There appeared to be some confusion regarding this activity. Some authors called the missile used an arrow, others called it a spear, and some may even confused it with the next activity (45) which was called a long dart.

²⁸⁸Stumpf and Cozens, (The Maoris), op.cit., p.212.

²⁸⁹Williams and Calvert, loc.cit. ²⁹⁰B.Thompson,op.cit.,p.328.

²⁹¹Stumpf and Cozens, (The Fijians), loc.cit.

²⁹²Russell, op.cit., pp.143-4.

In Hawaii, Culin described the activity of arrow-throwing as:

Arrows or darts consisting of the blossom end of the sugar-cane, are thrown in the following manner: A cord is wrapped around the middle of the cane arrow, and the other end being fastened to a stick about four feet long (la-au-ke-a-pu-a), which is held vertically at right angles to the arrow, which rests on the ground. The latter is then hurled in the air by the stick, the wrapped cord giving it a rotary motion. Four persons play, boys against boys or girls against girls, or two boys against two girls. The one whose arrow goes farthest wins. It was formerly a man's game. It would appear from Andrews that the fore-end of the pu-a was tied with string to prevent splitting. The arrows are also called pa-pu-a, from pa, "to throw", and pu-a, "cane arrow."²⁹³

Fornander also described the game, calling it "arrow-slinging.":

It was one of the most enjoyable pastimes of old days. This is its description. That would be a good arrow if it dropped at a distance of three or four times forty fathoms [240-320 yards] from the place of slinging. There are various ways of slinging arrows and the kinds of arrows are many also, for selection. The flower-stalk of the sugar-cane is used for arrows. Here are the kinds of arrows: If it has no stem it is called the lehua eater; if the arrow has blotches it is a man eater; if the body of the arrow is twisted it is a roll; if the arrow is cut short it is a stump, and so on....

Arrow slinging was therefore a gambling game to which everybody from all places could come. It was the pride of a skillful boy or man slinger.²⁹⁴

Bryan²⁹⁵ also described the activity as being "a strictly children's game."

²⁹³Culin, op.cit., p.234.

²⁹⁴Fornander, op.cit., p.216.

²⁹⁵Bryan, loc.cit.

Ellis said that in Tahiti a game called aperea was played:

It consisted of jerking a reed, $2\frac{1}{2}$ or 3 feet in length along the ground. The men seldom played at it but it was a common diversion of women and children.²⁹⁶

Ellis also described another facet of their activity as:

Throwing the spear, or darting the javelin, was an amusement in which they passed many of their juvenile hours. It was not a mere exercise of strength, like that exhibited in shooting with the bow and arrow, but a trial of skill. The stalk, or stem, of a plantain tree was their usual mark or target. This they fixed perpendicularly in the ground; and, retiring to a spot a number of yards distant, endeavoured to strike the mark with their missiles. These thrown with precision and force, readily penetrated its soft and yeilding substance.²⁹⁷

In New Zealand, Tregear stated:

Several varieties of games were played with spears or sticks representing spears. The principal of these (teka) consisted of throwing a dart, to the point of which a bunch of flax strips was fastened. The dart was long and light, heavier at the butt than at the point. The game was usually played on the sea-beach, and the player who hurled his dart farthest was hailed a winner.²⁹⁸

Best²⁹⁹ also described the use of "the whip in casting spears," and stated that it was of a different principle to that employed in slinging stones. Taylor³⁰⁰ described heteka, or neti, as a game played in New Zealand "with fern stalks, which are darted to see who can throw them the farthest."

²⁹⁶Ellis, op.cit., p.227.

²⁹⁷Ibid., p.294.

²⁹⁸Tregear, op.cit., p.56.

²⁹⁹Best, op.cit., p.140.

³⁰⁰Taylor, p.173., as given in Culin, op.cit., p.235.

In Fiji, Geddes³⁰¹ described a common game "for both children and young men when they are on the beach is to erect a pole in the sand and try to spear it with pointed sticks hurled from a distance." Another variation was given by Williams and Calvert³⁰² as: "veivasa ni moli is a game which consists in suspending a moli (orange, lemon, etc.) by a string, and trying to pierce it with the vasa, (a pointed stick,) while it is swinging about."

Russell³⁰³ wrote of the Tongan and Samoans that "there was a host of competitive games entailing the throwing of spears or javelins. The target might be a stick or coconut on the top of a pole. On the other hand the game may be to get distance." He also gave other variations as:

The Tongans had an unusual variety of the sport. They placed a lump of very soft wood on the top of a short post, then threw the spear up into the air so that it dropped down on to the target. When the Tui Tonga, the reverend divine chief of Tonga took part in a match, he always played last. An attendant stood by the post and as the Tui Tonga's spear came down it was his job to catch it and place it right on the bull's eye.

This deference to rank was common in Tongan sport. In an ordinary spear throwing contest between chiefs when the aim was to get distance, the highest ranking chief playing would be allowed a little handicap too. If his spear failed to get first place, it was advanced a spear-length. If it still failed to beat the spears of his opponents it could be advanced a further spear-length. The limit was three spear-lengths. If this was insufficient to give him a win he had to swallow his humiliation.³⁰⁴

³⁰¹Geddes, loc.cit.

³⁰²Williams and Calvert, op.cit., p.128.

³⁰³Russell, op.cit., p.143. ³⁰⁴Ibid., p.144.



Figure 34.
Throwing javelins (spears) at a coconut high on a pole (Refer page 98)



Figure 35.
Fijian Tinga or spear throwing. (Refer page 98)

Turner described a Samoan event as:

They set up the stem of a young coco-nut tree, with the base upwards, which is soft and spongy. One party throws at it and fills it with spears. The other party throws, and tries to knock them down. If any remain after all have thrown, they are counted until they reach the number fixed for the game.³⁰⁵

Stair³⁰⁶ described a similar game as did Turner except that he made no mention of the spears being knocked out of the target. In this event points were simply gained for each direct hit on the target. Wilkes also described the game of "litia a general sport of the Samoans, sometimes whole villages playing against each other.":

Two parties furnish themselves with light sticks of the Hisbiscus tiliaceus, about 8 or 10 feet long and as thick as a finger; the bark is stripped off, making them very light. The two parties arrange themselves in a line, and strive to throw these sticks far as possible; the party who succeeds in throwing fifty the farthest wins the game. The usual distance to which they throw is about 40 yards, and one would conceive it almost impossible for them to be thrown so far. A grand feast usually terminates the sport, the expense of which is borne by the losing party.³⁰⁷

45. Dart-Game or Teka
Classification. P,SP:d,s*,ex*.

This activity was not similar to the previous one and on further investigation the difference was readily recognized. Of this game Davidson wrote extensively. The following presents a few excerpts:

³⁰⁵Turner, op.cit., pp.212-3.

³⁰⁶Stair, op.cit., p.137.

³⁰⁷Wilkes, loc.cit.

A game played by throwing javelin like or club like sticks, or just ordinary rods of reed or wood to strike the ground and rebound along to the greatest possible distance has been observed on all the continents bordering the Pacific Ocean as well as in Oceania itself....

In Oceania the dart-game, generally called teka or tika, is found in most of the Polynesian and nearby islands.... The Polynesian appearances include Lau and Ellice Islands, Tonga, Samoa, Niue, Rakahanga, Manahiki, the Society and Cook groups, the Marquesas, Hawaii, New Zealand, Fiji and Rotuma. Information is lacking for Easter Island, Rapa, the Austral and Puamotu groups, the Chatham Islands, and a few isolated islands in Polynesia proper.

The game of teka consists of throwing a dart for distance. The dart is thrown in such a way that it flies from the hand, with a low trajectory, strikes the ground, often a low artificial or natural mound, and bounds or skips along a course of grass or hard earth. In many instances these courses are especially prepared for the game, and are permanent; in other cases, village streets, or greens, or open roads are utilized. At least in Tikopia, the Cook Islands, the Marquesas, Rakahanga, and Manahiki, and probably in some other places, the courses are reversible. After all the darts have been thrown, the contestants go to the other end to determine the score and then throw back in the opposite direction.

When information is complete there is usually mention of organized competition between selected teams from village streets or different villages. In some areas, judges are appointed to determine the scores and settle disputes.

Very little can be said concerning scoring. Most writers merely say that distance is the objective and that the furthest stick is the winner. However, the most detailed accounts we have, those by Firth for Tikopia and by Buck for the Cook Islands, indicate the great complexity of rules which may be found. Scoring in these areas is by side only, and only one team receives a score regardless of the number of sticks thrown.... At least in Tikopia, however, it is not necessary to surpass the farthest point reached by a dart of the opposite side; to overlap the tail of a dart of the other team is sufficient to disqualify it from winning.

[Davidson lists the three main types of darts in Oceania.]

1. Club-like. This type has been reported only from Hawaii where it is known as moa-hoo-holahola and pahee.... It is relatively heavy, about 21-41 inches long, and characterized by a flare near the head-end which tapers to a point at each extremity.

2. Simple sticks. The simple teka of one piece, generally 3-4 feet long is made of reed in the Marquesas and Society Islands; of cane in the Cook Islands; of wood in Niue; of wood or cane in Samoa and Hawaii; of coconut leaf midrib in Rakahanga and Manahiki where suitable wood is lacking; and of wood, native flax, or fernroot in New Zealand. In the Cook Islands a dart consisting of two lengths of cane is also used. Since this type of dart is similar to the simple ones, and dissimilar to the usual composite teka, it is included in the former group.

In the New Zealand pehu, the Cook Islands tumutumu and Hawaiian keapua, the fore-end of the plain dart is bound with a string or strip of vegetable-fibre until a knob-like head is formed. In some instances this is wetted and stuck into earth to increase its weight and size. In view of the widespread distribution of this custom of binding the dart-head, and its apparent lack in the intermediate area where the separate wooden head is now found, it is suggestive that the bound head may have preceded the composite teka....

3. Composite teka.... Consisting of a hardwood head 5-6 inches long and a shaft of reed 3-4 feet long, is found in Samoa, Niue, Tonga, Lau, Fiji, Rotuma, Tikopia, Anuda, the Ellice Islands, and possibly the Banks Island.... A cruder dart (teka-kiore) with a pointed hardwood head ten inches long and a tail of coconut leaflet midrib stuck into the blunt end of the head, is found in the Cook group. It is thrown for height and not for distance....

[Davidson lists five methods in the manner of throwing the dart.]

1. The most common seems to be by the forefinger, the ball of which is placed on the butt of the shaft. In those places where the long shafts are used, it is necessary to balance the shaft on the left hand. The contestant runs to a deadline and throws with all the force at his command, sometimes in an over-arm fashion, sometimes underarm.

2. In spite of the fact that a teka weighs only a few ounces, it is obvious that the throw exerts great pressure upon the finger. In Tikopia, but not elsewhere so far as reports indicate, this pressure is relieved by the use of a projection ring. This ring of coconut fibre is placed upon the forefinger, which it fits tightly, and is further fastened by an attached short string wound around the finger. To receive the ring and to prevent slipping, a notch is cut in the butt of the shaft. There is no information to indicate whether the Tikopians cast their darts farther than people in regions where the projection ring is unknown.

3. Although definite information is lacking, it seems that another method of throwing may have been in use in Hawaii in association with the short moa-hoo-holahola, the club-like stick twenty one inches long, which tapers to a point. Apparently it would be difficult to throw this short stick in the same manner as the lighter, longer ones, if we may judge by the manner of throwing sticks of this type in other regions. The tail may have been held loosely in the hand between the thumb and finger and the stick thrown overhand or underhand.

4. The use of throwing-cord in association with the teka-game is known to be wide-spread in Oceania, but the complete distribution cannot be accurately given.... The method of using the throwing-cord, however, is not the same throughout the distribution mentioned. In the Lau group a loop is employed. The butt end of the teka is placed against the string in one end of the loop, the other end of which is held by the forefinger. In Samoa, the Cook Islands, and the Marquesas, a knotted cord is used. In the Marquesas the cord, 4-5 feet long, is doubled and tied in a knot. The knot is placed against the centre of the shaft and the doubled string taken around the shaft, hence over itself between the knot and the shaft. The loop on the shaft is held intact by holding taut with the forefinger the other end of the cord while the hand grasps the shaft. This method is used in Samoa with a single cord, but there is a difference in that the knot is placed near the butt and the other end wound about the finger....

5. The throwing-whip has been reported for Samoa, the Cook group, Hawaii, and New Zealand. This device, it seems probable, is a development from the throwing-cord, since it is no more than the latter attached to a handle.

It seems permissible to assume that the more simple throwing-cord may have been known formerly, even though not reported, in Hawaii and New Zealand.... There are two ways of using the whip. In the words of Buck [1930,p.664.] :

"The New Zealand method consisted of sticking one end of the dart in the ground in a slant position. The knotted end of the cord was laid against the side of the dart toward its lower end; the cord took a turn around the dart and passed over itself on the inner side of the knot as in the simple form of throwing. The cord was held taut by the handle along the oblique course of the dart. A quick jerk with the handle propelled the dart forward and the cord was automatically released."

"The Cook Island method of using the handle differs from New Zealand in that after fixing the knot in the usual way, the cord is wound in a wide spiral around the dart which is then laid flat on the ground. A sharp jerk with the handle propels the dart."

The latter description refers to the teka-kokihi. The manner of throwing with the whip in Hawaii and Samoa is the same as that in the Cook Islands.³⁰⁸

Because of the complete nature of this article by Davidson in the coverage of all aspects of this game all other authors are listed in reference to the islands cited and only further information not already given will be stated.

In Hawaii, it was described by Bolton³⁰⁹ as "pahe"; Buck³¹⁰ called it both pahie or long dart and moa or short dart, and also described a dart game called ke'a pua which he said was "the Hawaiian form of the general Polynesian name teka," and a

³⁰⁸D.S. Davidson, "The Pacific and Circum-Pacific Appearances of the Dart-Game", Polynesian Society, Journal, No.45., 1936, pp.99-105.

³⁰⁹Bolton, op.cit., p.21.

³¹⁰Buck, (Arts and Crafts of Hawaii), op.cit., pp.374-8.

brief description of the use of the whip - stick method; Fornander³¹¹ described pahee and wrote of the gambling nature of the game; Malo³¹² described pahee and kea-pua; Mitchell³¹³ called the long dart ihe-pahie, and the short dart moa pahe'e; Bryan³¹⁴ also used the same terminology as Mitchell; Alexander³¹⁵ described pahee and stated that kea-pua was a similar game but played chiefly by children; Ellis³¹⁶ described both types of darts and their use; Brigham³¹⁷ described pahee and stated that it could be used as a weapon; Pukui³¹⁸ described a game called moa which was not similar to the game being described - this activity was chiefly a trial of strength to see who could break his opponent's moa by crossing them and pulling. The moa may have been identical to that used in throwing but the activity was not the same.

In Tahiti, Ellis³¹⁹ described the game of aperea as being similar to teka, but stated that reeds were used and "the men seldom played at it, but it was a common diversion for women and children."

³¹¹Fornander, op.cit., p.200.

³¹²Malo, op.cit., p.222., and; pp.229-30.

³¹³Mitchell, op.cit., p.2.

³¹⁴Bryan, op.cit., p.49.

³¹⁵Alexander, op.cit., p.89.

³¹⁶Culin, op.cit., pp.235-7.

³¹⁷Brigham, op.cit., p.59.

³¹⁸Pukui, op.cit., p.205.

³¹⁹Ellis, op.cit., p.308.

In New Zealand, Tregear³²⁰ described the Maori game of teka and a variation called neti or niti, where fern stalks were used; Stumpf and Cozens³²¹ stated that darts were made of manuka; Buck³²² gave a long and detailed description of teka, neti, niti or pehu; and Best³²³ described teka or neti stating that "prior to casting his dart a player would expectorate upon it and recite over it a charm to cause it to make a good flight."

In Fiji, Williams and Calvert³²⁴ described a game called tiga or ulutoa; Stumpf and Cozens³²⁵ and B.Thompson³²⁶ both called the game tinqa, while the latter also called it tinka or ulutoa.

Luomala³²⁷ described the game of teka in New Zealand; Churchill³²⁸ gave an excellent description of the game as played in Samoa but simply called it "stick-throwing,"; Russell³²⁹ described the Tongan game; Gardiner³³⁰ stated that the game of tiga or ulutoa was played in Rotuma but that it was probably introduced from Fiji; Stair³³¹ also described a Samoan game called O'le Tangātiā as similar to teka;

³²⁰Tregear, loc.cit.

³²¹Stumpf and Cozens, (The Maoris), loc.cit.

³²²Buck, (The Coming of the Maori), op.cit., pp.242-3.

³²³Best, op.cit., p.143. ³²⁴Williams and Calvert, loc.cit.

³²⁵Stumpf and Cozens, (The Fijians), op.cit., pp.10-11.

³²⁶B.Thompson, op.cit., p.330. ³²⁷Luomala, op.cit., p.79.

³²⁸Churchill, op.cit., pp.564-6. ³²⁹Russell, op.cit., p.144.

³³⁰Gardiner op.cit., pp.486-7. ³³¹Stair, op.cit., pp.138-9.



Figure 36.
Types of darts used in Polynesia. (Refer page 103)



Figure 37.
The Samoan stick or dart thrower. (Refer page 103)

Linton³³² described the Marquesan game of teka; Buck³³³ described the Manganian Society game as being called teka and stated that the dart or spear was termed tao; and Loeb³³⁴ described takalo as being "the favorite sport of the people." and called the dart a tika.

46. Bowling Disks or Mai-ka
Classification.SP:d,c*.

In Hawaii, Buck³³⁵ wrote that " 'ulumaika, or simply maika, was played on a prepared course (kahua) with stone disks also named ulumaika or maika." Ellis described two methods of play as:

Two sticks are stuck in the ground, only a few inches apart, at a distance of thirty or forty yards, and between these, but without striking either, the parties at play strive to throw their stone; at other times, the only contention is, who can bowl it farthest along the tahua, or floor.³³⁶

Buck³³⁷ also stated that "the disks were made of various kinds of stone. The periphery formed a narrow flat edge, and the two surfaces were slightly convex making the disk thicker in the center than at the edges. The convexity on each surface was even to make the disk run true."

³³² Linton, op.cit., pp.387-8.

³³³ Sir, Peter H. Buck, "Manganian Society," Bishop Museum Bulletin, 122 (Honolulu: Bishop Museum Press, 1934), pp.149-51.

³³⁴ Loeb, op.cit., p.117.

³³⁵ Buck, (Arts and Crafts of Hawaii), op.cit., p.372.

³³⁶ Ellis, op.cit., p.198.

³³⁷ Buck, (Arts and Crafts of Hawaii), loc.cit.

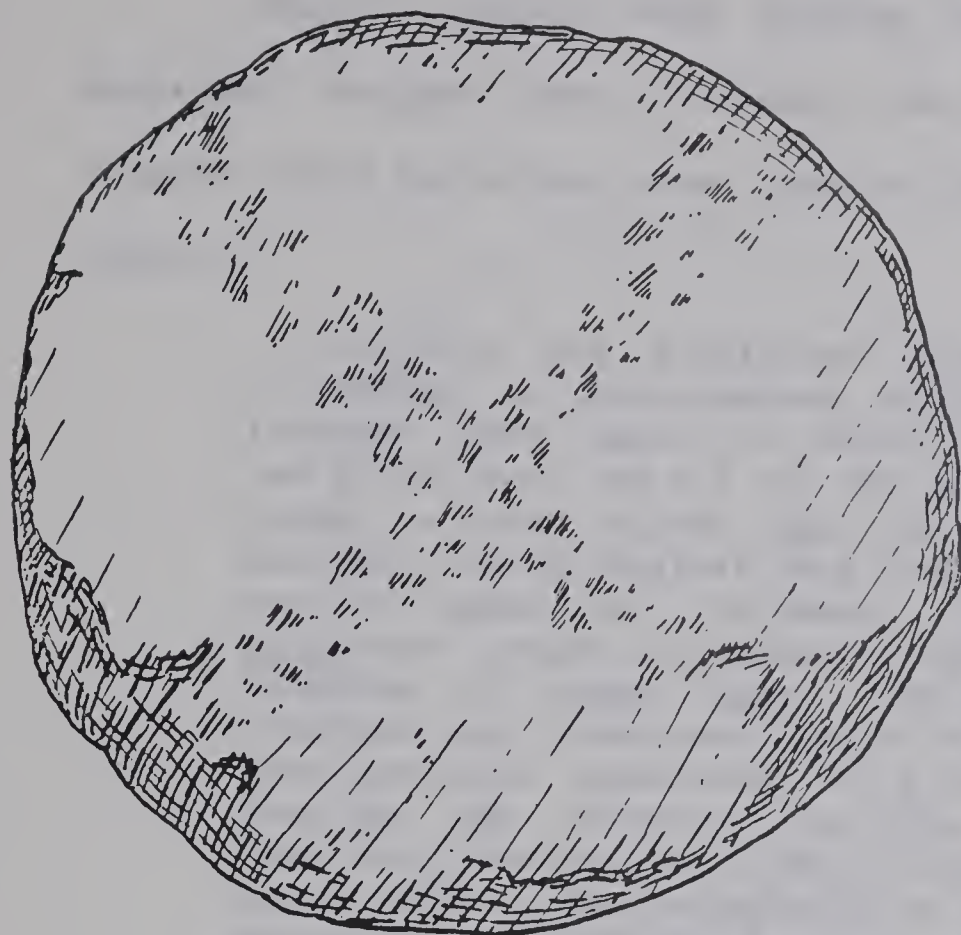
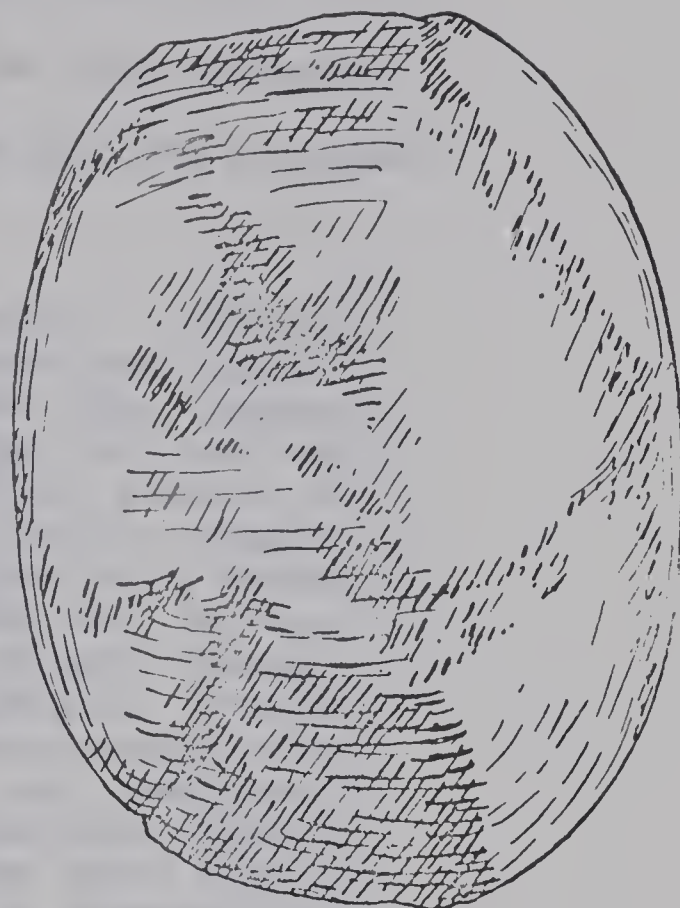
*Front View**Side View*

Figure 38.
Bowling stone from Little Papanui. (Refer page 111)

*Front View**Side View.*

Figure 39.
Bowling stone from Hawaii. (Refer page 111)

Malo³³⁸ stated "much betting was done," but only described the game where distance was the only contention. Brigham stated there were three forms of the game and described them as:

The first was a trial of strength in throwing or bowling to the greatest distance; the second required more skill to drive the ulu between two sticks near the end of the kahua; the third was rather a trial of the ulus than the players, as they were rolled against each other and the toughest won the game for its owner. There is a famous kahua near Kalae on Molokai, where may be seen hundreds of broken ulus. The players trained carefully and developed great strength. Various kinds of stone were used, but a heavy compact coral rock was the favorite; the ulu was sometimes spherical, but usually a thin cylinder with slightly convex ends. The largest ulu of the first form in this collection [Bishop Museum] has a diameter of $7\frac{1}{2}$ inches and weighs 22 lbs. Of the second and more common form the largest is 5 inches in diameter, 3 inches thick and weighs 44 ounces. The smallest has a diameter of $1\frac{7}{8}$ inches and weighs $3\frac{1}{2}$ ounces. Rough and unfinished ulus were used by children for practise. The average weight was a little over a pound. Choice ones were carefully oiled and kept in kapa.³³⁹

Culin³⁴⁰ stated that the ulu (maika) exhibited in the Bishop Museum "are made of lava coral, breccia, conglomerate, limestone, and olivine, and there is one of wood." Alexander³⁴¹, Bolton³⁴² and Bryan³⁴³ all described the game, and the latter stated "spherical stones were also used in throwing games and weighing up to 90 pounds, probably were used as tests of strength."

³³⁸Malo, op.cit., pp.220-1.

³³⁹Brigham, op.cit., pp.56-9.

³⁴⁰Culin, op.cit., pp.237-8.

³⁴¹Alexander, op.cit., p.60.

³⁴²Bolton, loc.cit.

³⁴³Bryan, loc.cit.

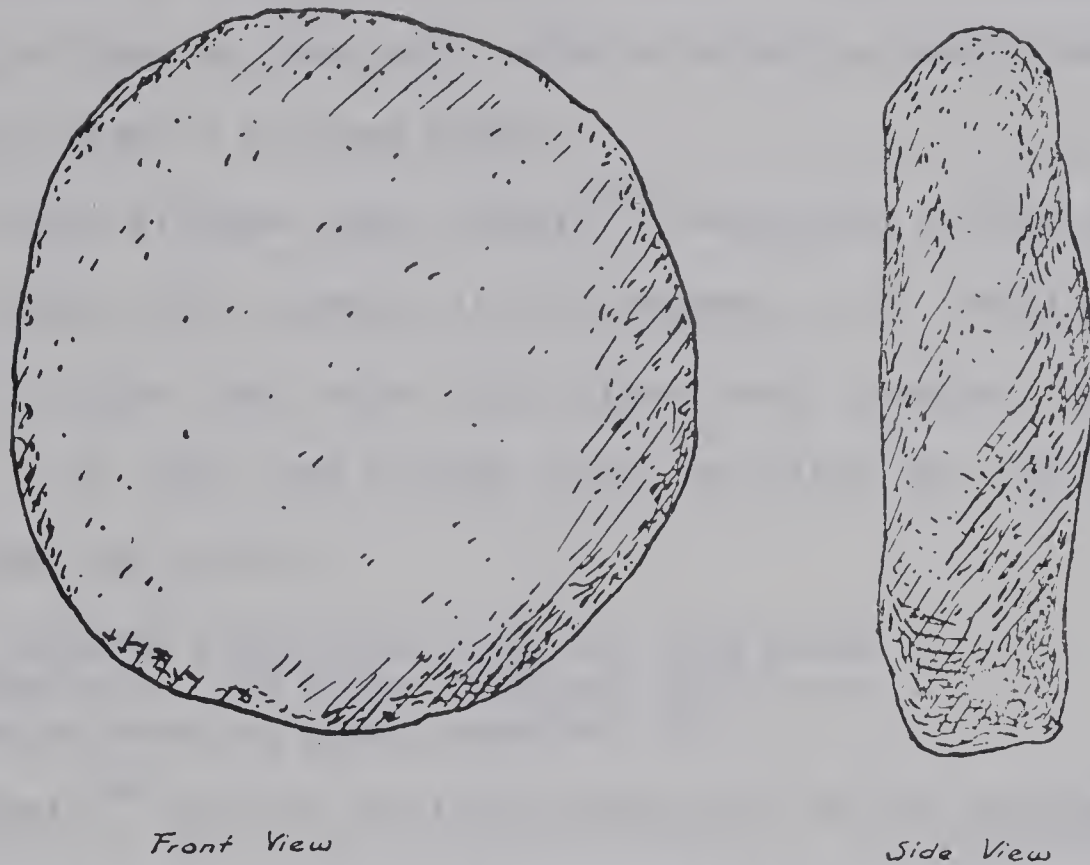


Figure 40.

Bowling stones used in Hawaii as a test of strength, weigh 84 and 89 lbs.
(Refer page 111)

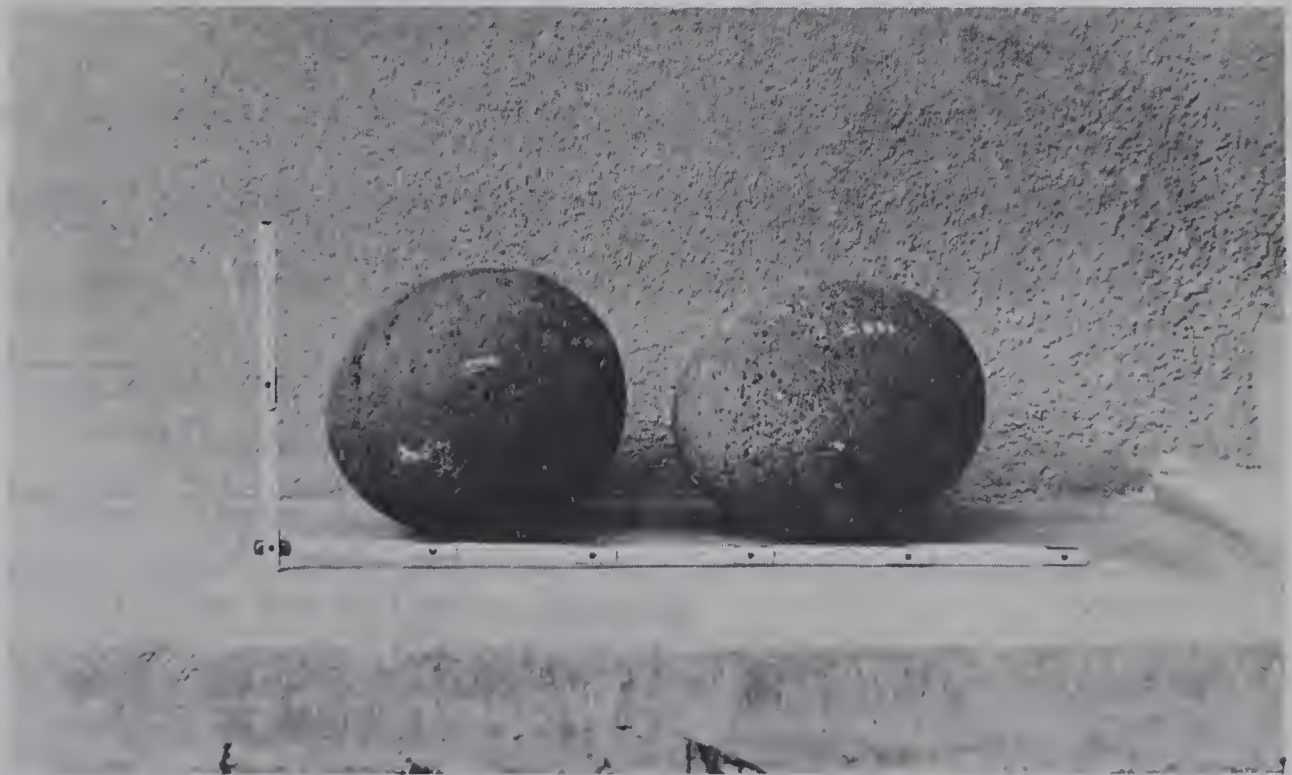


Figure 41.

Bowling stone from Vaitupu. (Refer page 111)

Another variation of this game was described by Russell³⁴⁴ as "played on a curved course, the disc being given a bias to take it round the curve." Buck³⁴⁵ also mentioned this aspect of play as "some were made one-sided to enable them to follow the bend of a curved track."

In Fiji, Williams and Calvert³⁴⁶ described a "kind of skittles, played with stones, is not uncommon; the skilful players will throw the stone with their back towards the skittles." In the Cook Islands, Buck described the use of "wooden disks" and stated:

Children played with disks cut from green breadfruit. In Samoa throwing disks were made of coral or green breadfruit.³⁴⁷

Bennett³⁴⁸ gave an excellent description of the ulumaika bowling stones found on Kauai and elsewhere in Hawaii and stated "they are all much alike. The typical ulumaika is discoidal with slightly convex sides, and is made of some fine-grained, polished stone." Bennett also gave the average diameter, weight and thickness of some fifty ulumaikas and added: "None of the stones has a slanting edge as needed for bowling trick curves. A few, however, have finger grips pecked on the sides."

³⁴⁴Russell, op.cit., p.145.

³⁴⁵Buck, (Arts and Crafts of Hawaii), op.cit., p.373.

³⁴⁶Williams and Calvert, loc.cit.

³⁴⁷Buck, (Arts and Crafts of Hawaii), loc.cit.

³⁴⁸Wendell C. Bennett, "Archeology of Kauai", Bishop Museum Bulletin, 80 (Honolulu: Bishop Museum Press, 1931), pp.77-8.

Skinner³⁴⁹ also gave an interesting report of bowling discs from New Zealand and other parts of Polynesia and he stated that the game was not known by the Maoris, but artifacts found of disc-like stones had a bias and for this reason he concluded that they were probably used for grinding grain rather than playing bowls. On reconsideration of the data from Russell and Buck on the use of biased discs it is possible that the artifacts described by Skinner were used in playing a game similar to maika. Skinner also gave descriptions of bowling discs found in the Hawaiian Islands, Cook Islands (wood), Ellice Islands, New Zealand and Tauranga.

Pollock³⁵⁰ described a game witnessed in Rarotonga of the Cook Islands as pua which appears to be a mistake in name as this is the name used for "pitching disks" as described in the next activity. An interesting aspect described by Pollock, and substantiated by Bennett, is the use of a "strip of native tape in his hand, some seven feet long, and taking the pua in his left hand, he wound the tape carefully round the outer edge. The next took a few turns of the loose end around the first finger of his right hand and held the pua vertically, much as a bowler holds his bowl ere delivering his shot." He also described the method of delivery as being underarm, and by jerking the tape upwards which "had the effect of imparting terrific impetus to the pua." The pua was described as being made of

³⁴⁹H.D. Skinner, "Bowling-Discs from New Zealand and Other Parts of Polynesia," Polynesian Society, Journal. No.55., 1946. pp.243-8.

³⁵⁰Harold J. Pollock, "The Polynesian Game of Pua", Chambers Journal, London (Sept. 1948), pp.487-8.



Figure 42.
Hawaiian Bowling Stone. (Refer page 111)

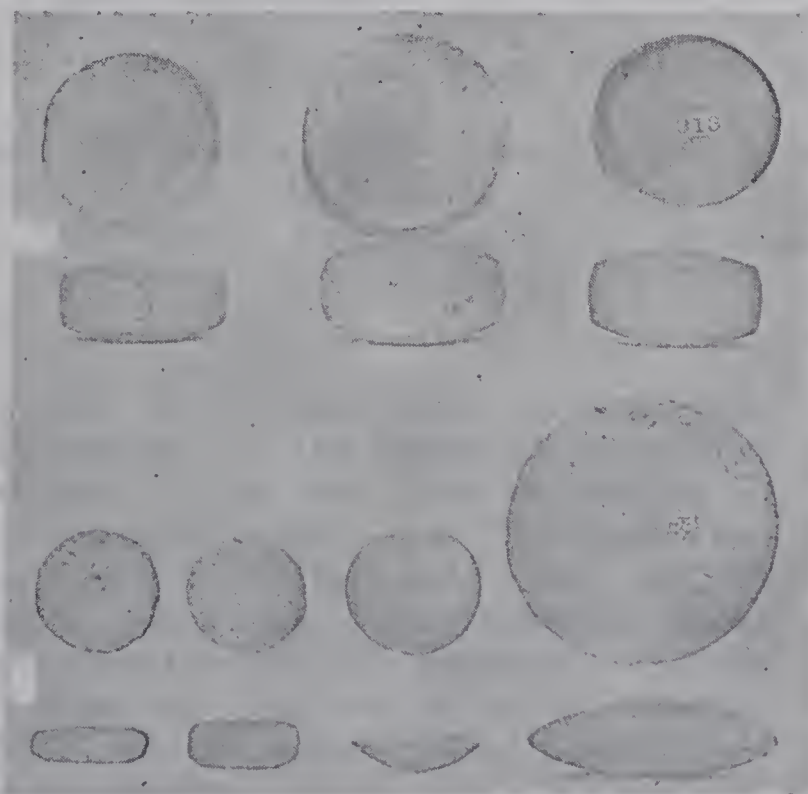


Figure 43.
Bowling stones and pitching stones. (Refer page 111 and 118)

wood about six inches in diameter and one inch wide at the edge, and that the native record for a throw was about three hundred and ten yards.

47. Pitching Disks or Pua.
Classification.SP,C*:d,s*,c*.

In Hawaii, Buck³⁵¹ described the artifacts and stated with one exception that "all the specimens are light; so if they were used for pitching, it was probably for a short distance onto a mat, like the wooden pitching disk of Mangaia, termed tupe. In Samoa coconut-shell disks, also termed tupe were pitched onto a mat in the game of lafonga."

In Fiji, B.Thompson³⁵² described the game of lavo which appears to resemble pua. It is played with the flat round seeds of the walai creeper (Mimosa Scandens). "The Tongan immigrants learned the game and carried it back to Tonga under the name of lafo, where the seeds are scarce, they substituted discs of coconut-shell, which were great improvements." The game was described as follows:

A board is made with mats about fifteen feet long, slightly raised at the edges so as to form a sloping cushion. The four players sit two at each end, so arranged that the partners are divided by the length of the board, and each is sitting beside an adversary. Each player throws five discs alternately with his opponent, and the object is to skim the disc so as to be nearest the extreme edge, and to knock off an adversaries disc that may be nearer.

³⁵¹Buck, (Arts and Crafts of Hawaii), op.cit., pp.373-4.

³⁵²B.Thompson, op.cit., pp.330-1.

The under edge of the disc is oiled with a rag, and very nice judgement is required to impart a "break" from the cushion so as to topple off an opponent's disc and leave your own in its place. In scoring it is not unlike tennis. You begin at six and count to ten, and the best of five makes the set.³⁵³

Williams and Calvert³⁵⁴ also described the Fijian game lavo, and Russell³⁵⁵ described the Tongan and Samoan game of lafo and gives an account of their incredible skill. Turner³⁵⁶ stated they also "try to knock one another's disc off a given spot." Another interesting feature of this game was described by Stair³⁵⁷ as "O'Lafonga-tupe, or throwing; at which none but chiefs were allowed to play." Churchill³⁵⁸ gave a full description of the game and its implements and states that a set of disks consists of "four, the three larger disks are made of coconut shell, the smallest is the flat seed of the Tahiti chestnut."

In Mangaia, Buck³⁵⁹ described a similar game but stated that the "wooden discs (tupe) were pitched onto a plaited coconut leaflet mat in competitions between two men or two pairs of men."

³⁵³Ibid., p.331.

³⁵⁴Williams and Calvert, op.cit., pp.127-8.

³⁵⁵Russell, loc.cit.

³⁵⁶Turner, op.cit., p.215.

³⁵⁷Stair, op.cit., p.138.

³⁵⁸Churchill, op.cit., pp.567-8.

³⁵⁹Buck, (Mangaian Society), op.cit., p.151.

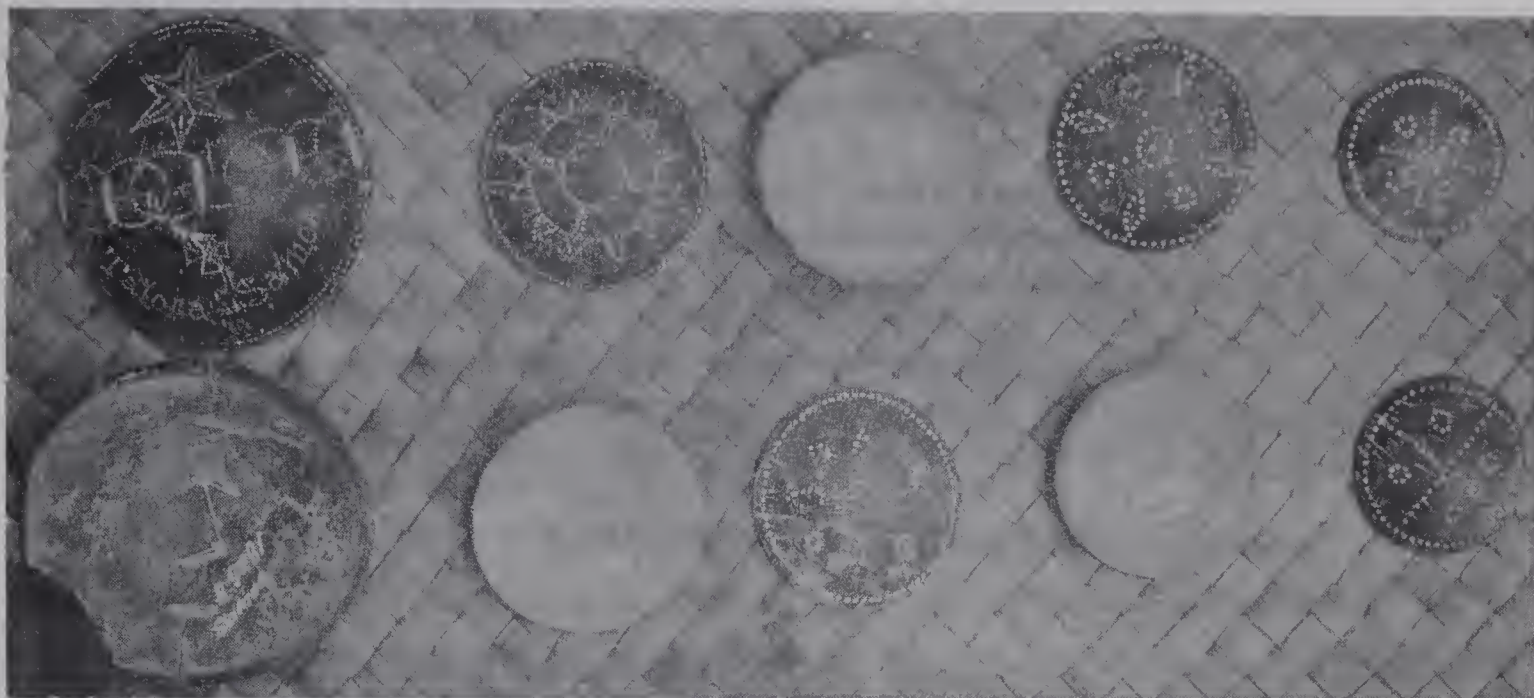


Figure 44.
Pitching discs from Samoa. (Refer page 118)

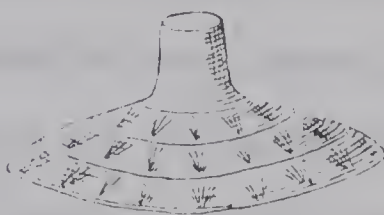


Figure 45.
Hawaiian pitching disc (Refer page 118)

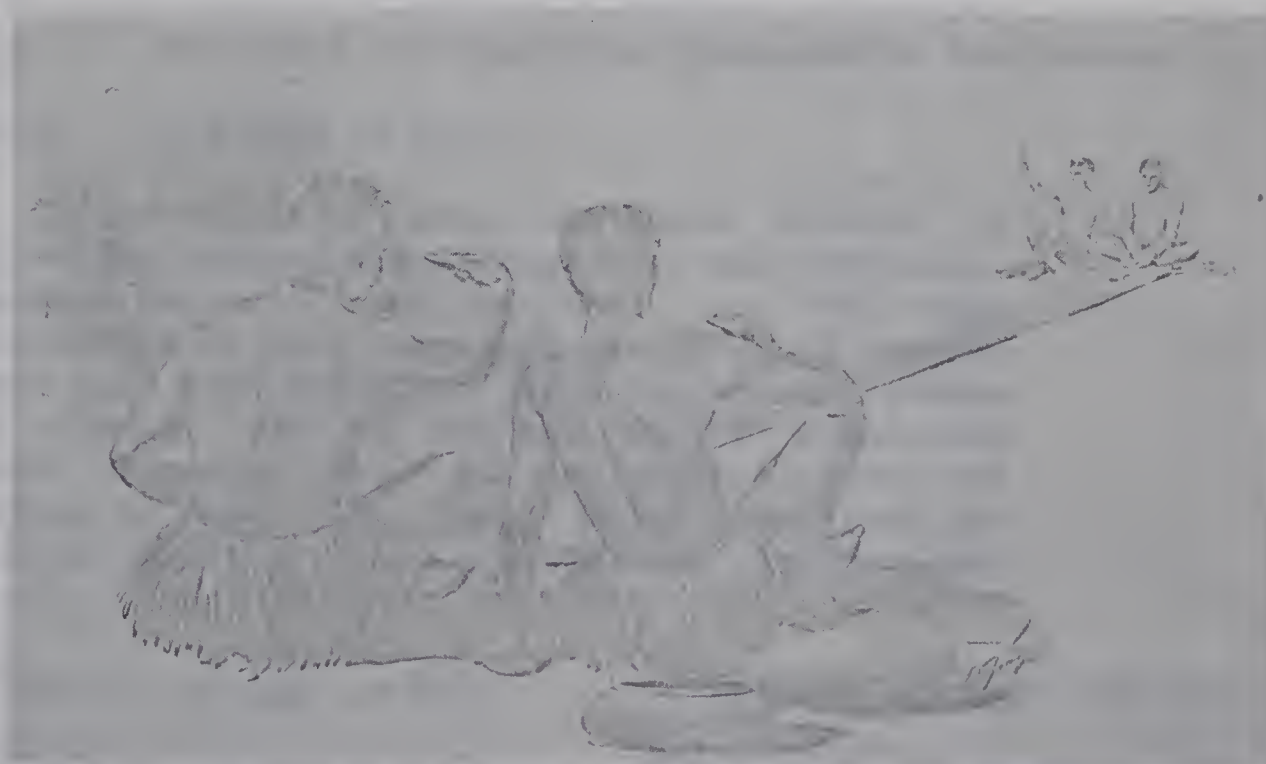


Figure 46.
Samoan natives playing shuffle-board or pitching-discs. (Refer page 118)

48. Ring Casting or Ki-a-lo-a-la-le-na.
Classification.SP:d.

In Hawaii Culin described the activity as:

A game of casting rings over a small stake or pin. The rings are about an inch in interior diameter. Four men play, each with ten rings. The one who puts the most rings on the pin wins a prize. On the birthday of King Kamehameha I, rings made of sections of cocoanut shell (le-na-ni-u), wrapped with kapa to prevent their breaking, are used in a similar game.... My informants state that stone rings also were anciently used.³⁶⁰

49. Hide the Stone or Pu-he-re-he-ne.
Classification.SP:d,e,c*.

The game of puhenehene resembled the game of no'a (to be described next, No.50), with which it has often been confused. Three notable examples are given by Brigham³⁶¹, Bolton³⁶², and Alexander³⁶³, who all described the game of no'a but called it puhenehene. In Hawaii, Buck³⁶⁴ described it as being "played indoors at night by two groups, each of which guessed in turn where the other group had hidden a small stone termed no'a." This term for the stone was probably the source of confusion. According to Malo:

A long piece of tapa, was made perhaps by stitching several pieces together, was stretched between one party and the other.... Then three men lifted up the long tapa and with it covered over and concealed from view one of the groups of players. One of the men of the number who were concealed then hid the pebble which was called a noa. The tapa which curtained or covered them was then removed, and the men, one

³⁶⁰Culin, op.cit., p.239.

³⁶¹Brigham, op.cit., pp.60-1.

³⁶²Bolton, op.cit., p.22.

³⁶³Alexander, op.cit., pp.90-1.

³⁶⁴Buck, (Arts and Crafts of Hawaii), op.cit., p.367.

of whom had the noa, leaned forward and looked down. (The purpose of leaning forward was to conceal the countenance as much as possible, because it was as much by the study of the countenance as by any other means that one was to judge which of the players had the noa about him). Then the other side made a guess where the noa was. If the guess was correct, it counted for them; if not, for the other party. When either side scored ten, it had the victory.³⁶⁵

A similar description was given by Fornander³⁶⁶ except he stated that the sides were made up of ten: "they must, however, be alternately men and women until ten are chosen." Bryan³⁶⁷ and Mitchell³⁶⁸ both described this game with the latter stating five or six comprised the team and a "coconut leaf midrib, maile" was used to touch the shoulder of the person suspected of having the noa.

50. Find the Stone or No'a
Classification.SP:d,e,c*.

In Hawaii, Malo described the game as follows:

Noa was a sport that was extremely popular with people and chiefs. The number of those, including chiefs, who were beggared by this game was enormous. The people were seated in two groups facing each other, and five bundles of tapa were placed (on a mat), between the two groups. These bundles were to hide the noa under. Two well-skilled persons were chosen to hide the noa. This was a small piece of wood or of stone. Bets having been made, one side hid their noa under one of the piles of tapa. This done, the players sat still and shut their eyes. The opposite side, who had attentively watched the man while he was hiding the noa, made a guess as to its position. If they guessed correctly, it counted for them. The other side then made their guess, and that side which first scored ten won the game.³⁶⁹

³⁶⁵Malo, op.cit., p.218.

³⁶⁶Fornander, op.cit., pp.196-8.

³⁶⁷Bryan, op.cit., p.50.

³⁶⁸Mitchell, op.cit., p.20.

³⁶⁹Malo, op.cit., pp.225-6.

Ellis gave an excellent description of the game, especially the actual placing of the noa under the pile of tapa:

The person to hide the noa took it in his right hand, put his arm as far as the elbow under the bundle, moved his arm about under the five bundles which were contiguous to each other, and finally left the noa under one of them.

The guessing party watched every movement of the hider's arm in an attempt to judge where the arm relaxed to leave the noa.... The guessers having come to a decision, the person presumably opposite the suspected bundle leaned forward and gave it a sharp flick with his rod. The bundle was lifted to show whether the selection was right or wrong and the point was scored accordingly.³⁷⁰

Brigham³⁷¹ gave the name of the piles or puu as kihi, pili, kau, pilipuka and kuhipuka and also stated that each player had a "polished wand, called maile, several feet long, usually armed at the end with a bit of dog's skin or a ki leaf." which they used for lifting the piles. Another variation of the game he described was: "to avoid striking the heap concealing the stone." Mitchell³⁷² stated that the game can be played by hiding the stone in sand as well as kapa. The game was also described by Bryan³⁷³, Alexander³⁷⁴, and Bolton³⁷⁵. Alexander and Bolton called it puhenehene but were obviously mistaken. Corney³⁷⁶ described a variation by stating that "six people play" using "three pieces of cloth."

In Rotuma, Gardiner described another favorite game as played on the beach:

³⁷⁰Ellis, op.cit., p.81.

³⁷²Mitchell, op.cit., pp.20-1.

³⁷⁴Alexander, loc.cit.

³⁷⁶Corney, loc.cit.

³⁷¹Brigham, loc.cit.

³⁷³Bryan, loc.cit.

³⁷⁵Bolton, loc.cit.

To make a bank of sand, and out of this to scrape a number of holes in the sand. A piece of coral is then taken in the hand, and while these are filled up, hid in one.... The unsuccessful in guessing, in which hole the coral has been placed, will be set upon the others, and covered in sand.³⁷⁷

51. Stone Hiding or Hu-na po-ha-ku.
Classification.SP:d,e,c*.

In Hawaii, Culin described it as:

A number of players stand in a row with their closed hands outstretched, and another endeavors to guess in which hand a stone (po-ha-ku-maa, "sling stone") is concealed, slapping the hand he selects. If he guesses correctly, the one who had the stone takes his place.³⁷⁸

In New Zealand, Taylor described a similar game as:

Tutu kai, a circle being formed, one takes a little stone, or anything else, in his hand, and then another repeats a verse. A person then goes around the circle, and guesses in whose hand it is hid, each having his fist closed; if he is right, the person who has the stone, takes his place, and goes round; if he is wrong, he continues until he discovers where it is hid.³⁷⁹

Tregear, also described tutukai as:

A game resembled our "hunt the slipper," and consisted in a small circle of persons sitting with closed fists while one of the players went round and tried to guess the whereabouts of a small pebble which was rapidly passed round the ring from one to another; the person on whom the stone was found taking the guesser's place.³⁸⁰

52. Leaping into the Sea or Le-le-ka-wa.
Classification.E,SP:d,v,ex*.

In Hawaii, many authors made mention of Le-le-ka-wa but few described the activity with much detail.

³⁷⁷Gardiner, op.cit., p.488.

³⁷⁸Culin, op.cit., p.242.

³⁷⁹Taylor, op.cit., p.217.

³⁸⁰Tregear, op.cit., p.59.

Culin³⁸¹ described it as "precipice jumping or leaping from lofty cliffs into the sea....The feat is performed as a game, the first one reaching the goal being regarded as the winner."

Fornander³⁸² described "bathing by jumping," as: "It is a high precipice where a man jumps from. If the man makes a skillful leap, touching the water toes first, it is called iomo, which means, 'without splash'." Mitchell³⁸³ gave two variations: "Lele kawa, diving feet first from a cliff making the least possible splash," and "Lelepahu, diving feet first to make the greatest splash." Pukui³⁸⁴ stated "neighbours would race each other to the beach or in leaping off the cliffs into the sea." Malo³⁸⁵, Bolton³⁸⁶, Alexander³⁸⁷, and Bryan³⁸⁸ also described the activity but gave little added information.

Ellis³⁸⁹ stated that in Tahiti a kind of a stage was erected "near the margin of the deep part of the sea or river, leaping from the highest elevation into the sea, and chasing each other in the water." In New Zealand, the Maoris had similar activities; Tregear³⁹⁰ wrote: "Diving games were also in fashion many of the swimmers rushing over the banks of a river at the charge (Kokiri) and leaping one after another into a deep pool, some diving feet first, others turning somersaults, etc. At times the jump was made from a pole placed horizontally over the water."

³⁸¹Culin, op.cit., p.214.

³⁸³Mitchell, op.cit., p.3.

³⁸⁵Malo, op.cit., p.233.

³⁸⁷Alexander, op.cit., p.90.

³⁸⁹Ellis, op.cit., p.307.

³⁸²Fornander, op.cit., p.206.

³⁸⁴Pukui, op.cit., p.212.

³⁸⁶Bolton, loc.cit.

³⁸⁸Bryan, op.cit., p.51.

³⁹⁰Tregear, op.cit., p.58.

Best³⁹¹ only described a feet first entry, while Buck³⁹² and Stumpf and Cozens³⁹³ both mentioned the use of a plank placed out over a deep hole. Cowan gave an interesting account of the activity as:

A variation of this sport was enjoyed by the people of the Lakeland. This sport was called Rerenga-wai or flying into the water. At many Rotorua lakeside villages, trees, chiefly Pohutukawa, which extended long branches over the water, were made use of as diving boards. A limb of the tree would be stripped of its twigs, the upper side adzed down and smoothed, and the end of the branch ornamented with carving. The young people of the village would throw off their garments, young men and girls would stand holding hands along the limb of the tree, sing a chorus of a diving song and then plunge into the water.³⁹⁴

B.Thompson³⁹⁵ as well as Williams and Calvert³⁹⁶ described a Fijian game called ririka (leaping) in the following way:
 "An upright post is fixed at the edge of a reef, and the upper end of a long coconut tree rests on it, so as to form an easy ascent, with the point projecting beyond the post, and raised about fifteen or twenty feet above the surface of the water. The natives run up this incline in a continuous single file, and their rapidly succeeding plunges keep the water all round white with foam."

³⁹¹Best, op.cit., p.141.

³⁹²Buck, (The Coming of the Maori), op.cit., pp.240-1.

³⁹³Stumpf and Cozens, (The Maoris), op.cit., pp.212-3.

³⁹⁴J.Cowan, The Maori, Yesterday and Today (Wellington: A.H. and A.W. Reed, 1962), pp.208-9.

³⁹⁵B.Thompson, op.cit., p.317.

³⁹⁶Williams and Calvert, loc.cit.

In Samoa, Stair³⁹⁷ described the activity as: "O le Turi-oso-ifo, or leaping quickly in succession from some bold rock or part of the coast into the deep sea beneath, is another favourite pastime of the young of both sexes. On these occasions they constantly leapt feet foremost into the dark waters below, keeping up the amusement for hours together."

In Niue, Loeb³⁹⁸ stated "diving contests (uku) were frequently indulged in. The contest might be held between two individuals as a test of superiority, or it might be held between the two groups from opposite ends of the island."

53. Athletic Events.
Classification.SP,E:d.

In Hawaii, Bryan³⁹⁹ and Malo⁴⁰⁰ both described the turning of somersaults as hookakaa, while the latter described it as a game in which "boys turned over and over or turned somersets [sic] on the grass or on the sand." A variation of this was given by Mitchell, who, described two activities as follows:

Kuwala Po'o, Somersaults. Suitable for boys and girls dressed appropriately to race by rolling over and over on the green grass.

Ho'okaka'a, Racing by turning cartwheels.
[which is similar to the above] .⁴⁰¹

In New Zealand Tregear⁴⁰² described some children's games as "turning summersaults [sic] (turupepeke), leaping (tupeke), and the long jump (kai-rere)."

³⁹⁷Stair, op.cit., pp.139-40.

³⁹⁸Loeb, op.cit., pp.117-8.

³⁹⁹Bryan, loc.cit.

⁴⁰⁰Malo, loc.cit.

⁴⁰¹Mitchell, op.cit., pp.12-13.

⁴⁰²Tregear, op.cit., p.57.

Best⁴⁰³ stated "different forms of jumping were indulged in occasionally, but apparently this form of exercise was not much practiced," also, "tree-climbing was, of course, a favourite exercise among the young, and fearless three-climbers the natives were."

In Fiji, Quain⁴⁰⁴ stated that the "children learn to climb tall coconut trees." While Williams and Calvert⁴⁰⁵ described an activity called veikalawanasari, which "is a species of hop, skip, and jump." Stumpf and Cozens described labolabo kanace, a kind of leap frog as:

The Fijians played the game by having one player lie flat on the ground. The second player jumped over him to lie flat a little further on. The third jumped over the other two and lay down in his turn, and so on till all were lying down, when the end man would spring up and start afresh, the others followed, forming a sort of endless chain.⁴⁰⁶

G. Turner⁴⁰⁷ described the Samoan native's tree-climbing ability and stated: "climbing cocoa-nut trees to see who can go up quickest," was one of their sundry amusements.

In Hawaii, Malo⁴⁰⁸ described a water game Kaupua, as: "swimming or diving for a small, half ripe gourd that would barely float in the water."

⁴⁰³Best, op.cit., p.140.

⁴⁰⁴Quain, loc.cit.

⁴⁰⁵Williams and Calvert, op.cit., p.127.

⁴⁰⁶Stumpf and Cozens, (The Fijians), op.cit., p.11.

⁴⁰⁷G. Turner, op.cit., p.217.

⁴⁰⁸Malo, loc.cit.

54. Bandy or Apai.
Classification.SP:d.

In Tahiti, Ellis described one of their "most laborious games" as "apai, or paipai," which "resembled a sport in some parts denominated 'bandy'." He described the game as:

A ball is provided, and the players are furnished with sticks about three or four feet long, bent at one end; with these they strike the ball, each party endeavoring to send it beyond the boundary mark of their opponents. The ball is made with tough shreds of native cloth, tightly knotted together. The sticks used by the Tahitians were rude and unpolished, just as they were cut from the tree; but those used by the inhabitants of the Southern Islands are made with the aito, or iron-wood, the handle wrought with great care, and sometimes curiously carved, while a round protuberance is formed at the lower end, which is slightly curved, and augments the force with which they strike the ball.⁴⁰⁹

55. The Hoop or Pirori.
Classification: P,SP:d,ex*

The use of the hoop or pirori seemed to be peculiar to the Maori, as it was not mentioned in any of the literature studied in other parts of Polynesia. Tregear described the hoop (pirori) as being "used by children, but sometimes by adults in a sinister manner:"

In the grim spirit consonant with the idea of amusement possessed by a fierce and revengeful race, for the hoop had now and then the dried skin of a dead human foe stretched upon it, as a mark of contempt for and degradation of the tribe to which the flayed warrior belonged. The hoop, the frame of which was of forest vine (akatea), was about two feet in diameter, it was driven backwards and forwards between two parties stationed at either end of a course and was beaten to and fro with sticks, while an appropriate song was changed.⁴¹⁰

⁴⁰⁹Ellis, op.cit., pp.296-7.

⁴¹⁰Tregear, op.cit., p.54.

Buck stated that:

Hoops (pirori, porotiti) were made of a vine (aka) and trundled back and forward between two players or two parties. No sticks were used except in a Tuhoe game. This game is recorded for adults in which the tattooed skin of an enemy was stretched over a hoop of supple jack and trundled between two jeering groups to satisfy their hate of the deceased.⁴¹¹

Best⁴¹² partly agreed with Buck and stated: "The children of Maori-land did not trundle hoops as we do by means of a stick, but threw them. They seem to have been smaller than those made by us, and were formed by bending a piece of plant aka (stem of a climbing-plant) and lashing the two ends together." Another variation was given by Del Mar⁴¹³ as: "Small hoops were made of manuka branches and the game was to roll them over any obstacle which came in a straight course from goal to goal, a distance of fifty feet."

56. Catapult and Slingshot.
Classification.P,SP:d.

In Tahiti, Ellis⁴¹⁴ wrote that "the practice of throwing stones from a sling" was principally a military game, and said "the Tahitians excelled most of the nations of the Pacific; devoting to its practice a considerable portion of their time, and being able to cast the stone with great accuracy."

⁴¹¹Buck, (The Coming of the Maori), op.cit., p.246.

⁴¹²Best, op.cit., p.155.

⁴¹³Del Mar, op.cit., p.101.

⁴¹⁴Ellis, op.cit., p.294.



Figure 47.
Native climbing a coconut tree almost as easy as walking on the ground.
(Refer page 128)

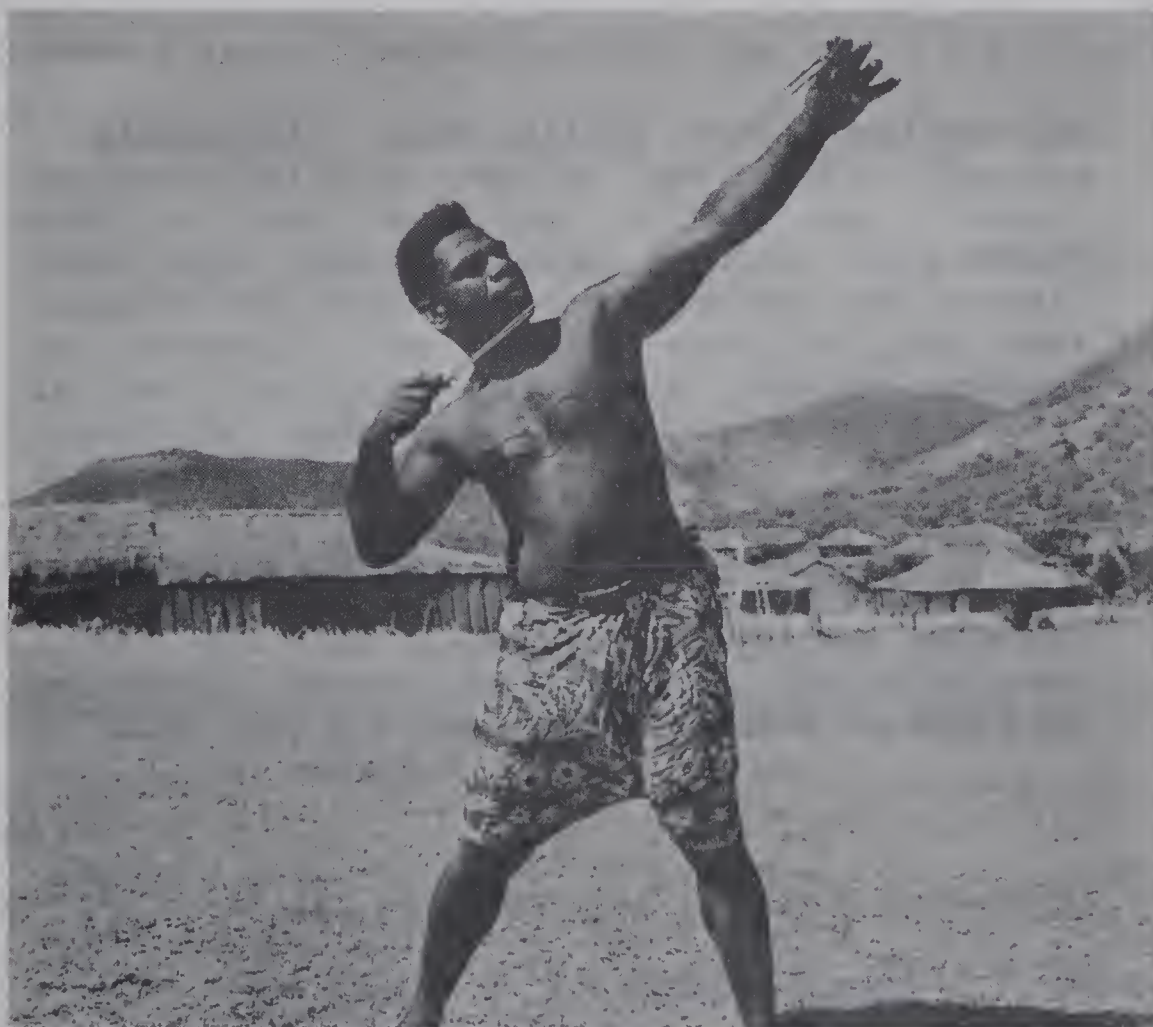


Figure 48.
Native using a sling. (Refer page 130)

In New Zealand, Best⁴¹⁵ stated that "there is no reliable evidence to show that the Maori ever employed the sling to throw stones in war, and the fashioned sling-stones used in northern isles formerly are not found here. The sling proper may have been used here as a toy, but even that much is doubtful." Buck, on the other hand, stated:

A catapult of a kind, termed tipao on the east coast.... A pole of green titoki was fixed upright with the butt in the ground, and a cord fastened to the upper end was pulled by a person to bend the pole considerably. Another person, standing behind the bent pole, held a stone against the front bend with the fingers from behind. At a signal, the cord was let go and the released spring cast the stone forward with considerable force. It was used by boys in sport and never become an offensive weapon.⁴¹⁶

In Fiji, Stumpf and Cozens⁴¹⁷ listed the sling as being one of their weapons "which they use very dexterously." while in the Marquesas Islands, Linton described the use of the sling as:

Elaborately made slings were employed in warfare, while a smaller and cruder form was used by boys as a toy. These toy slings were made from ti leaves, which were braided together to form the cords, while the pocket was formed by the natural width of the leaf. In use the long end of the cord was wrapped around the hand and the short, or release end, held between the thumb and finger.

Slings, with especially prepared sling stones, were used for all long range fighting. The stones were oval or double conical and sometimes weighed as much as half a pound. They were made of heavy rock and specimens seen were rhythmically pecked, but unground....

⁴¹⁵Best, op.cit., p.140.

⁴¹⁶Buck, (The Coming of the Maori), op.cit., p.239.

⁴¹⁷Stumpf and Cozens, (The Fijians), op.cit., p.7.

In the battle the stones were carried in nets slung around the waist, or, in sea fights, were piled in the bottom of the canoe.⁴¹⁸

57. Children's Games (Minor).
Classification.SP:d,ex.

Because of the numerous nature of these games they were recorded as a group, and the main characteristic they exhibited was dexterity.

In Hawaii, Malo described two children's games as:

Panapana, a child's game with a niau, the small midrif of the coconut leaf. This was bent into the form of a bow in the hand, and, being suddenly released, sprang away by its elasticity.

Honuhonu, a game in which one boy sat astride the back of another boy who was down on all fours.⁴¹⁹

Mitchell⁴²⁰ described pākā or pōhaka kele as "skimming stones on the surface of the water." Alexander⁴²¹ stated "koheoheo, or the children's game of jumping the rope," was one of the ancient sports. A counting game was described by Culin called he-lu-pa-ka-hi as:

Two persons simultaneously put out their fingers and count, first one finger, crying "one"; then two, crying "two", and so on up to ten, repeating ten times. The game is played very rapidly, and if a player makes an error he loses, otherwise the one first completing the count wins.⁴²²

In New Zealand, Tregear described several children's games as follows:

⁴¹⁸Linton, op.cit., pp.388-9.

⁴¹⁹Malo, loc.cit.

⁴²⁰Mitchell, op.cit., p.3.

⁴²¹Alexander, loc.cit.

⁴²²Culin, op.cit., p.231.

A curious game (titi-touretua) was played with four carved sticks, about eighteen inches long. A song (ngari) was sung and the sticks tossed backwards and forwards between the players (of whom there were generally six) in time to the song. The sticks were held in a vertical position at the start, and then thrown from one person to another, across or round the circle of players, who sat some little distance apart. The sticks were not to touch each other, and had to be received in a particular way; the butts every now and then being dropped to the ground.

A childish game (kakere) was played by transfixing a sweet-potato (kumara) on a stick and jerking it off to see how far it could be thrown. "Ducks and drakes" (tipi) were made by throwing flat stones so as to skip along the surface of the water.

"Counting out" (wi) figured among Maori games. The players stood round a circle (called wi) drawn on the ground, and the principal, indicating with his finger, counted out the players saying, "Pika, pika, pere rika," etc., in one of the nonsense - jingles customary at such games.... When all were counted out, an effort was made to enter the circle without being touched by its defender, and if touched such person had to help to defend the circle.⁴²³

Best⁴²⁴ described some children's games as: 'skipping of flat stones along the surface of water; topa, koke, and niu, consisted of casting a broad leaf across a space, such as from bank to bank of a stream. The leaf was made to balance by inserting a grass culm in the midrib."

Stumpf and Cozens⁴²⁵ described how the Maoris made "small rafts" for the children, "which they poled and paddled."

⁴²³Tregear, op.cit., pp.55-60.

⁴²⁴Best, op.cit., p.157.

⁴²⁵Stumpf and Cozens, (The Maoris), op.cit., p.213.

In Fiji, Geddes⁴²⁶ stated that "stone throwing, too is popular," and Williams and Calvert⁴²⁷ described the activity of skipping stones off the water. In Samoa, G. Turner described "spinning the cocoa-nut," another amusement as:

A party sit down in a circle, and one in the centre spins a cocoa-nut. When it rests, they see to whom the three black marks or eyes on the end of the shell point, and impose upon him some little service to the whole, such as unhusking chestnuts, or going for a load of cocoa-nuts for them. This is especially worthy of remark, as it is the Samoan method of casting lots.⁴²⁸

OTHER GAMES ALREADY DESCRIBED WHICH HAVE DEXTERITY AS A PRIMARY CHARACTERISTIC ARE:

58.	<u>Boxing.</u>	Refer to Game No.16.	Page 31
59.	<u>Fencing.</u>	Refer to Game No.17.	Page 35
60.	<u>Wrestling.</u>	Refer to Game No.18.	Page 36
61.	<u>Tug-of-War.</u>	Refer to Game No.19.	Page 45
62.	<u>Finger Pulling.</u>	Refer to Game No.20.	Page 46
63.	<u>Wheelbarrow Racing.</u>	Refer to Game No. 3.	Page 15
64.	<u>Swimming Race.</u>	Refer to Game No. 4.	Page 15
65.	<u>Canoe Racing.</u>	Refer to Game No. 5.	Page 18
66.	<u>Coconut-Shell Casting.</u>	Refer to Game No.21.	Page 46
67.	<u>Ball Games.</u>	Refer to Game No.22.	Page 47
68.	<u>Hop Scotch.</u>	Refer to Game No. 7.	Page 23
69.	<u>Tag.</u>	Refer to Game No. 8.	Page 24
70.	<u>Blind-Man's Bluff.</u>	Refer to Game No. 9.	Page 24
71.	<u>Prisoner's Base.</u>	Refer to Game No.10.	Page 25

⁴²⁶Geddes, loc.cit.

⁴²⁷Williams and Calvert, loc.cit.

⁴²⁸G.Turner, op.cit., pp.214-5.



Figure 49.
Children playing cat's cradle. (Refer page 137)



Figure 50.
Children playing cat's cradle. (Refer page 137)

E. GAMES AND ACTIVITIES WITH ENIGMA CHARACTERISTICS:

72. Cat's Cradle, String Figures or Hei .
Classification.F,S:e,i*,d*.

Cat's cradle was probably one of the most widely known games, not only in Polynesia, but the rest of the world. For the data collected to be reproduced would have represented hundreds of additional pages.

In Hawaii, Malo⁴²⁹ wrote: "there were many figures into which the string was worked. It was a game at which the genius of the Hawaiian was especially fitted to excell, for by nature he was a born rigger, skilled in manipulating and tying ropes and knots." Pukui⁴³⁰ stated: "string games, called hei ("snares"), were common. Sometimes a figure was made on a single loop of string by one person. The more elaborate figures required two loops of string and two players who sat facing each other, lacing and interlacing their strings until the figure was finished. Each figure had a chant of its own." Fornander added:

A string one fathom long is required. The two hands are employed, but at first four fingers, two of the right and two of the left only are engaged. In case the ten fingers are all employed the teeth are required in biting. There are many cradles, and their name chants to be recounted, and it is full of merriment to hear them recited. Lands and people are mentioned in the chants which accompany the play.⁴³¹

Dickey listed some one hundred and fifty-five string figures and "slip tricks" and their variations in Hawaii, and nine in the New Hebrides. The following was a typical example.

⁴²⁹Maló, op.cit., p.234.

⁴³⁰Pukui, op.cit., p.205.

⁴³¹Fornander, op.cit., pp.210-4.

One Eye, or Nenu. By far the most popular string figures in Hawaii are those which show diamond-shaped openings of a simple form which are called by the children "one eye", "two eyes", etc.- a name evidently derived from the Hawaiian word maka which means both "eye" and "mesh of net." Children of all races start in the first year of school with a form of "two eyes" and consider themselves experts when they can make all forms from "one eye" to "six eyes." The older people think these too simple but have given me Hawaiian names for the figures.

One eye (nenu) [see Figure 51] is made as follows:

1. Start with string on left thumb and left little finger. Pass right thumb into hanging string from distal side, turn right thumb toward body and up. Then pass little finger from proximal side into right thumb loop and extend. The string is then in Position 1. but with string crossed in center of figure. The string from right little finger to left thumb passes over the string from right thumb to left little finger.
2. Opening A.
3. Release thumbs. Pass thumbs over index strings and pick up radial little finger string.

Puleju ka nenu.

Roasted, the nenu.

Ko'ala ka nenu.

Broiled, the nenu.

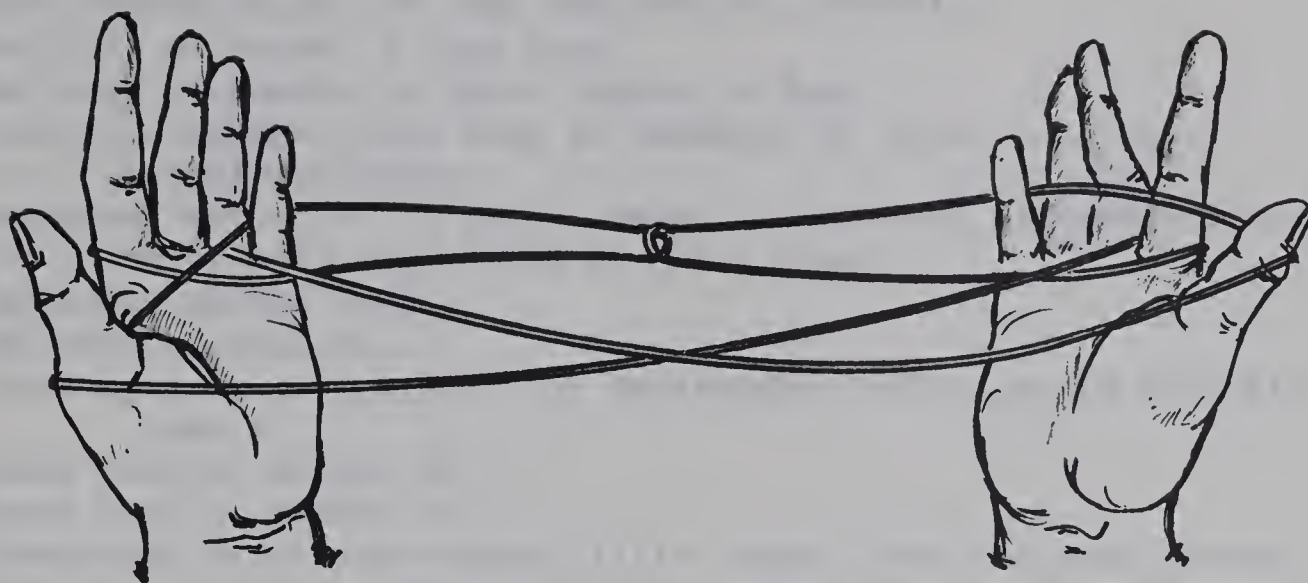


Figure 51.

String figure, "one eye" or nenuē, made on Oahu.

When chanting, swing hands so that with one line, one end of the figure is uppermost; with the other line the other end.⁴³²

⁴³²Lyle A. Dickey, "String Figures from Hawaii," Bishop Museum Bulletin No.54 (Honolulu: Bishop Museum Press, 1928), pp.18-9.

The other figures described by Dickey are:

Hawaiian figures made by one player.

Ku e hoopio ka la: up rose the sun; or Kuhaupio.

One eye, or nenu: a flat fish.

One eye, or Kumuwai o Puna: spring of Puna.

One eye, ahamaka: tapa hung as hammock; or palai huna nui:
extreme shyness.

Two eyes, method No.1; koko o Makalii: calabash of Makalii; or papio-
maka-nui: papio fish with big eyes.

Two eyes, method No.2.

Two eyes, method No.3.

Three eyes A, method No.1; or papio-maka-liilii: papio fish with small
eyes.

Three eyes A, method No.2.

Three eyes A, method No.3.

Three eyes B; or papio-maka-liilii: papio fish with small eyes.

Three eyes C; or papio-maka-liilii: papio fish with small eyes.

Four eyes A, method No.1.

Four eyes A, method No.2.

Four eyes A, method No.3.

Upena (fishnet).

Waiu-olewa A (pendulous breasts).

Four eyes B; or papio-maka-liilii, papio fish with small eyes, method
No.1.

Four eyes B. method No.2.

Four eyes B. method No.3.

Five eyes, method No.1; or papio-maka-liilii: papio fish with little
eyes.

Five eyes, method No.2.

Six eyes, method No.1; or papio-maka-liilii: papio fish with small eyes.

Six eyes, methods Nos. 2 and 3.

Piko o Kahoalii A (naval of Kahoalii); or punawai o ka lani: spring of
the high chief.

Huewai o Kupouloula A: water gourd of Kupouloula.

Na alu leha o lalo: glance down.

Hale-kumu-ka-aha: house made with coconut cord; house guarded by tapu,
method No.1; or hale o Kupouloula: house of Kupouloula.

Hale-kumu-ka-aha, method No.2; or hale o Kupouloula: house of Kupouloula.

Huewai o Kupouloula: water gourd of Kupouloula; or Huewai o Kuala: water
gourd of Kaula.

Unnamed.

Piko o Kahoalii B: navel of Kahoalii, ka punawai o ka lani: spring of
the chief; or uala poe A: round sweet potato.

Two eyes, or papio-maka-nui: papio fish with large eyes.

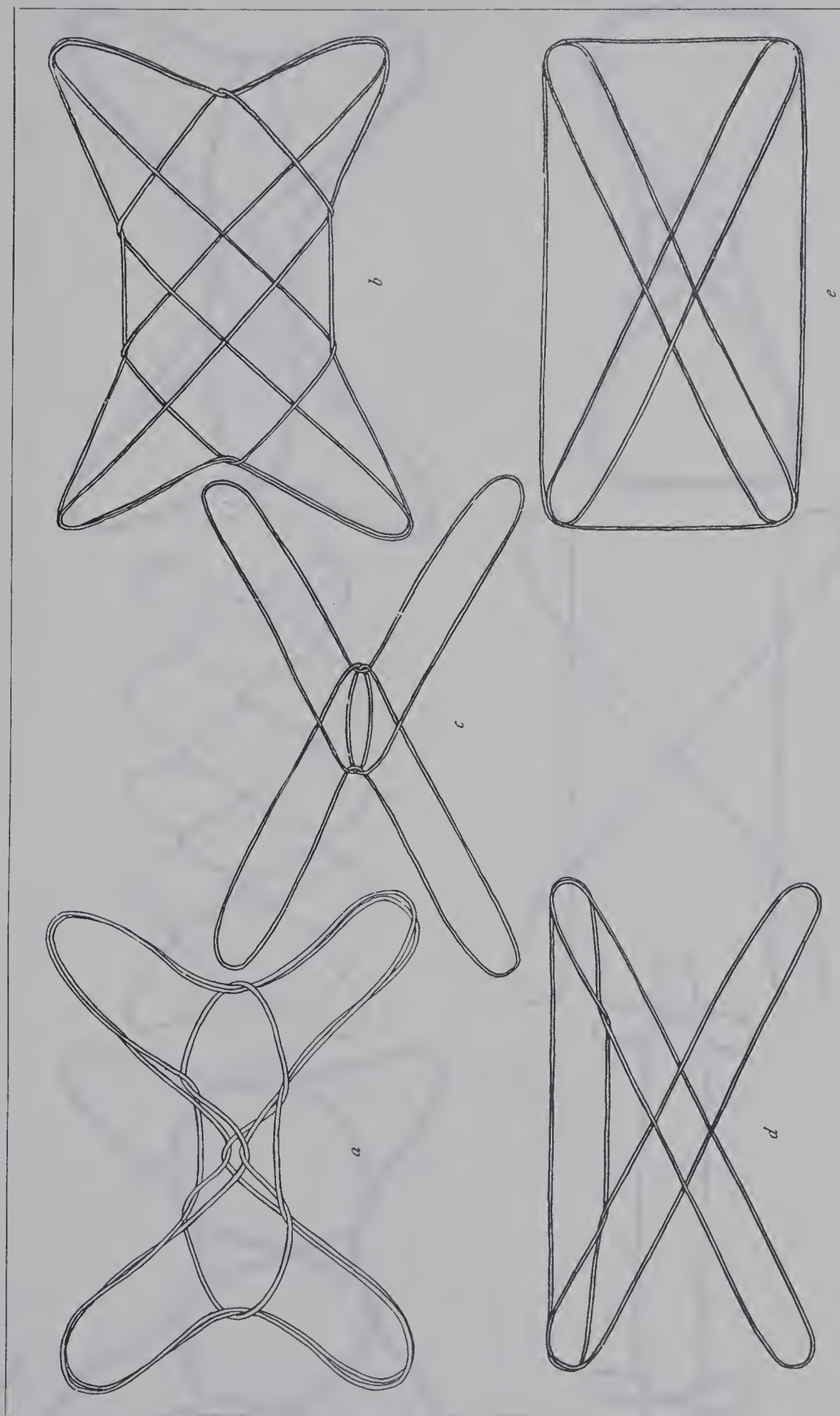
The three houses.

Waiu o Hina: breasts of Hina, and moo-iki A: little lizard.

Moo-iki B: little lizard, method No.1.

Moo-iki B: little lizard, method No.2.

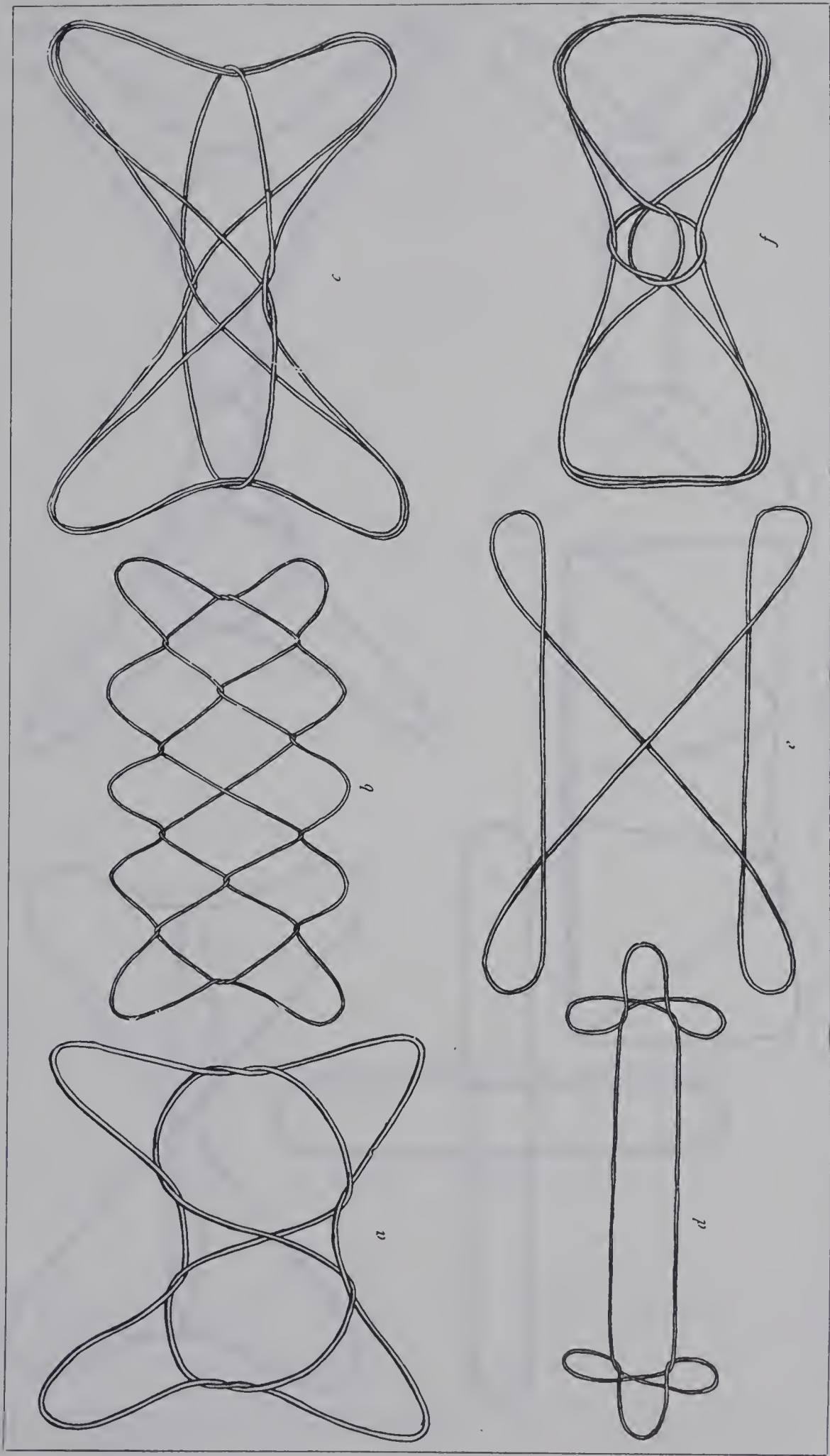
Ka-nuku-o-ka-manu: bill of the bird.
 Butterfly.
 Lonomuku: maimed Lono.
 Kauiki; or ke kumu o Kauiki: the base of Kauiki.
 Wailua.
 Wailua nui a Lanai: great Wailua of Lanai.
 Hawaii.
 Hawaii Nui A; or Ka laau a Kaleikini: stick of Kaleikini.
 Hawaii Nui B.
 Kinikaupuu A: Kini-the-hunchback.
 Kinikaupuu B, or Palila A.
 Pola ai: poi bowl.
 Tuu tamahine: my daughter; ka hau Kololio: the land breeze of Kona; and
 kauki: little canoe.
 Honu, method No.1.
 Honu, method No.2.
 Po, method No.1.
 Po, method No.2.
 Waiu olewa B: pendulous breasts; or waiu o Lewa: breasts of Lewa.
 Hoku A (star); spider; or kohe ekemu: embrace me.
 Waiu olewa C: pendulous breasts.
 Thirteen eyes.
 Waawaa iki naaupo A: stupid little fool.
 Kalahale: precipitous.
 Open the gate; pauma wai A: waterpump; or poho paakai: salt hole.
 Shut the gate.
 M.
 Upo or Wailuku: Wailuku River bridge.
 King's palace and servant's house.
 Mountain.
 V.
 Hale alii: house of a chief.
 W.
 Pakii lehua: carved lehue platter.
 Kukuilauania A: method No.1, or Kanemoa.
 Kukuilauania A: or Kanemoa, method No.2.
 Kukuilauania B.
 Gate.
 Imu.
 Umi a haka: strangled and placed on altar.
 Hula Lumahai: Lumahai swimming path; kai o Leahi: sea of Leahi; Waawaa
 iki: little fool; Waiwai e; rich man; or waa liilii: little
 canoe.
 Pauma oki hala o Kahuku" knife that cuts the Kahuka hala; pohuehue:
 convolvulus; or na waa kiowea: kiowea canoes.
 Waiu olewa D: pendulous breasts; or waiu o Ne: breasts of Ne.
 Kipuka hele la Maui: lasso of Maui; or kipuka ili o Woka Lale:
 noose of Walter Raleigh.
 Weoweo: fish.
 Na kanaka alualu Kai o Leahi: men who chase the Leahi Sea.
 Hapuu-kane, Hapuu-wahine: male child, female child; Puu-uala nui, puu-
 uala iki: large potato hill, small potato hill.
 Waa: canoe.



HAWAIIAN CAT'S-CRADLES

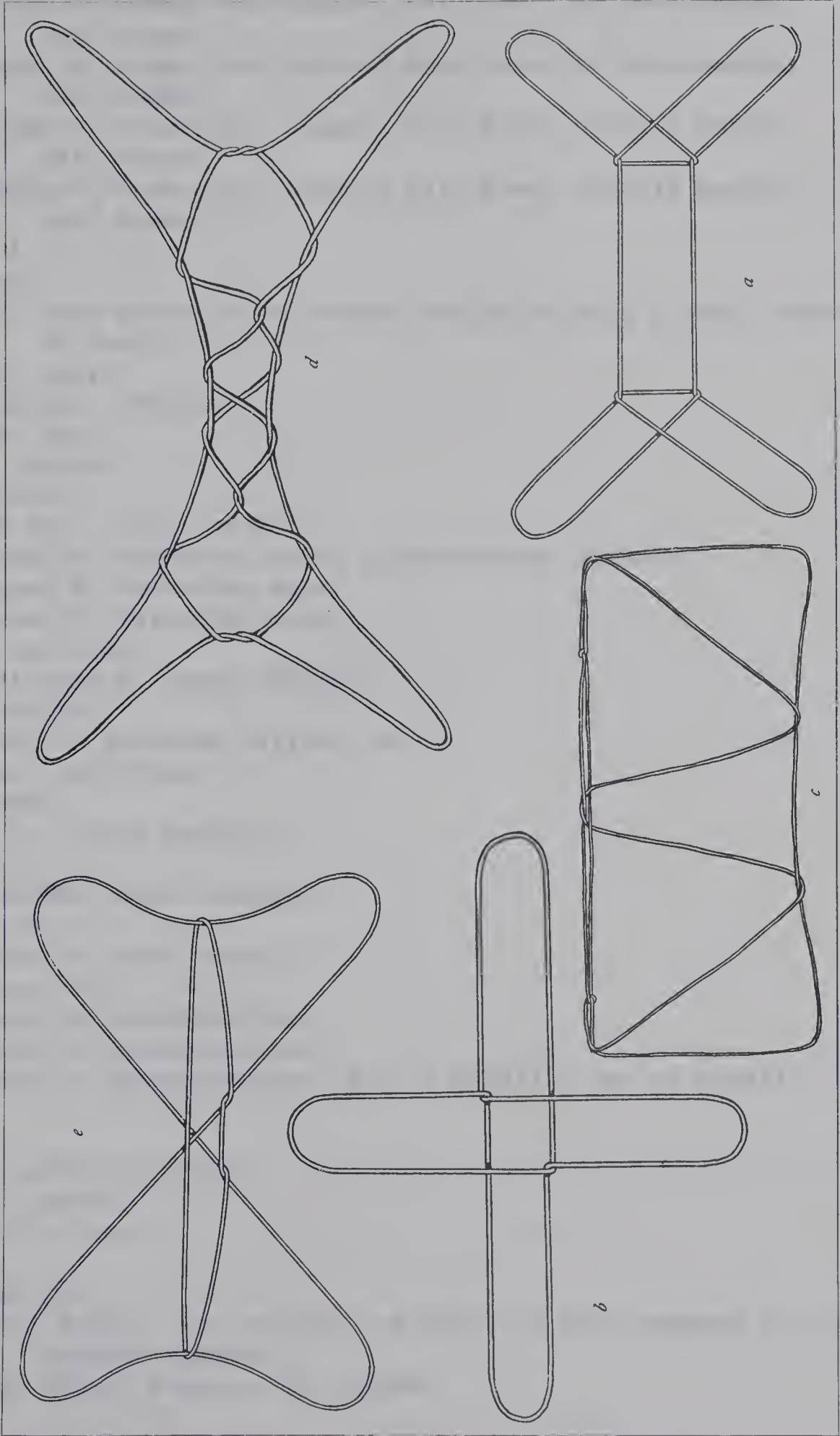
In the Museum of Archeology, University of Pennsylvania.—*a*. *E-ke-ha-ka*—ace of hearts (No. 21,526); *b*. *Po*—darkness (No. 21,495); *c*. *Pau-ma-wai*—pump (No. 21,449); *d*. *Ma-hi-ki*—see-saw (No. 21,494); *e*. *E-ke-ma-nu*—ace of diamonds (No. 21,492).

Figure 52.
Hawaiian cat's cradle figures. (Refer page 137)



HAWAIIAN CAT'S-CRADLES
In the Museum of Archeology, University of Pennsylvania.—*a*. *Pa-pi-o-ma-ka-nu-i-nu-i* (No. 21,488) ; *b*. *U-pe-na*—net (No. 21,498) ; *c*. *E-ke-pe-ki*—ace of spades (No. 21,527) ;
d. *O-ko-le-a-mo* (No. 21,512) ; *e*. *Hoo-ko-mo* (No. 21,491) ; *f*. *Ko-ke*—vagina (No. 21,452).

Figure 53.
Hawaiian cat's cradle figures (Refer page 137)



HAWAIIAN CAT'S-CRADLES
In the Museum of Archeology, University of Pennsylvania. —a. *A-na-ma-nu*—bird-house (No. 21,497); b. *Pa-hi-o-lc*—saw (No. 21,450); c. *Wai-u-la-wa*—full breasts (No. 21,496);
d. *Pa-pi-o-ma-ka-lit-lit* (No. 21,447); e. *Pou*—post (No. 21,451).

Figure 54.
Hawaiian cat's cradle figures (Refer page 137)

Uala: sweet potato.

Bridge.

He kanaka A: a man; Ana Paakai: Salt Cave; or hale paakai:
salt house.

He kanaka B: a man; Ana Paakai: Salt Cave; or hale paakai:
salt house.

He kanaka C: a man; Ana Paakai: Salt Cave; or hale paakai:
salt house.

He kanaka D: a man; Ana Paakai: Salt Cave; or hale paakai:
salt house.

Haiku A.

Kalalea.

Hawaii; hele iluna: house above; and hale loulu o Kane: palm house
of Kane.

Punana: nest.

Noho Paipai: rostrum.

Hoku B: star.

Opae: shrimp.

U: breast.

Hale o Kaeo: house of Kaeo.

Okole-amo A: twitching anus; or Hee-holua: sledding.

Okole-amo B: twitching anus.

Okole-amo C: twitching anus.

Loli: sea slug.

Ai pili-wale A: scant rations.

Pai: strike.

Ai holei B: generous rations; or V.

Ka-naoi: naio tree.

Nine eyes.

Uwene B: flatus ventris.

Haiku B.

Kane ulukoa: Kane, creator.

Palila B.

Na kuihele: short steps.

Ka-ilio: dog.

Pae mahu A: hermaphrodites.

Pae mahu B: hermaphrodites.

Pae mahu C: hermaphrodites; koko o Makalii: net of Makalii.

M.

X.

Cat's cradle solitaire.

Loho: Cypraea.

Pahiolo A: saw.

Broom.

Winking Eye

Umeke ai o Hina: poi calabash of Hina; or hale ahamaka ole: house
without hammock.

Hana ka uluna: prepare the pillow.

Hawaiian figures made by two players.

Cat's cradle.

Pauma-wai B: water pump.

Pahiolo B: saw.

Pahiolo C: saw.
 Pahiolo D: saw.
 Pahiolo E: saw.
 Kauhale a Limaloa: village of Limaloa; Hale o Pele: volcano
 pit; Kuahiwi o Haleakala: top of Haleakala; or hale
 Inikini: Indian house.
 Palaoa: plow.

Hawaiian slip tricks.

Hand slip trick A.
 Hand slip trick B.
 Hand slip trick C.
 Kale-opa: lame Kele; Pua-kala: thorny flower; or puhi palemo:
 gliding eel.
 E loli e: turn.
 Knot slip trick.
 Wrist slip trick.
 Thumb slip trick A.
 Thumb slip trick B.
 Thumb slip trick C.
 Thumb and index slip trick.
 Index slip trick.
 Middle finger slip trick.
 Changing loop from index to middle finger.
 Changing loop from toe to toe.
 Toe slip trick A.
 Toe slip trick B.
 Toe slip trick C.

New Hebrides string figures.

Kombe: fish net.
 Rat eating cane.
 Canoe.
 Yam, and dancing sunbeams.
 Bow and arrow.
 Kilikia leaves.
 Man in bed.
 Two birds flying.
 Baby's mat cradle.⁴³³

String figures in Fiji were described with great care by

Hornell who listed fifty-four various figures:

String figures from Fiji.

Yalova: come here!
 Balawa: screw pine.
 Ika: fish.
 Lulu: owl.
 Bembe: butterfly.

⁴³³Ibid., pp. 1-159.

Kalokalo: star.
 Beka: flying fish.
 Banuve: caterpillar.
 Velovelo: dugout canoe.
 Wangga titendre tavuki: capsized canoe.
 Wangga-ni-Viti: Fijian canoe.
 Vai: sting ray.
 Lairo: land crab.
 Tavola: tavola tree.
 Sanga ndondoli: trying to stretch.
 Tambua: whale's teeth.
 Utosuvi: bread-fruit cut in two.
 Lawa: fishing - net.
 Bokola: cannibal's victim.
 Ngata.
 Ngata bobo: blind snake.
 Ngata rai: snake with eyes open.
 Mbelo: crane.
 Tevoror: the devil.
 Nunga veve: crooked nunga.
 -Imbi nunga.
 Rara-ni-kula: parrakeet's playground.
 Vale-ni-kula: parrakeet's home.
 Vonu: turtle.
 Kuveti: tapa pattern-board.
 Undu and Koro: Undu Point and Koro Island.
 Sova: basket with handles.
 Koro and Wakai: Koro and Wakaia islands.
 Vale: house.
 Mata-ni-singa: the sun.
 Vonu, Undu, and Koro (second version).
 Vasua nggamu-nggamu: giant clam.
 Imbi: mat.
 Drau-ni-ivi: Tahitian chestnut.
 Tavola: tavola tree (second version).
 Lalakai: wicker food-platter.
 Mata-ni-singa: the sun (second version).
 Mataka: morning.
 Mataka lai-lai.
 Mataka leva.
 Suviauto: bread-fruit cut open.
 Mawa.
 Kapa (kava): roll of sennit.

Sorokake series.

Wangga: canoe.
 Sorokake proper.
 Thiukambi: where one climbs up.
 Uthutomo: dirty nose.
 Wa-lala: empty string.
 Kuro: cooking-pot.
 Tambanggara: branched opening.

Vindikete: flick on the stomach.⁴³⁴

Hornell also listed nine figures from Tonga as:

String figures from Tonga.

Pilitaleiku: tailless lizard.

Tafue-a-Fanene: Fanene's skipping rope.

Maile-lau-momo.

Matapa-a-Tenioko: Tenioko's gateway.

Ipu sioata: drinking glass.

Matamata kupenga: spider's web.

Loukave: kabe leaf.

Toloa: the Southern Cross.

Humu: the "Coal-hole."⁴³⁵

In Samoa, six figures are listed:

String figures from Samoa.

Ili: saw.

Vaepato: duck's feet.

Vaepato tolu tamaivae: three-footed duck.

Paa: crab.

Mata upenga: meshes of a net.

Moenga: bed.⁴³⁶

In the Ellice Islands, Tokelau, and Gilbert Islands, three figures are listed:

String figures from Ellice Islands, Tokelau, and Gilbert Islands.

Unnamed figure.

Teuila: lightning (Kalisi, Lizard).

Tafa: roll of sinnet.⁴³⁷

In Tahiti, Hornell listed five string figures:

String figures from Tahiti.

Fetia: star.

Afata: box.

Manua: squares or lozenges.

Paoti: scissors.

Tahiti and Morea.⁴³⁸

⁴³⁴James Hornell, "String Figures from Fiji and Western Polynesia", Bishop Museum Bulletin, No.39. (Honolulu: Bishop

⁴³⁵Ibid., pp.61-70.

⁴³⁶Ibid., pp.71-76.

⁴³⁷Ibid., pp.77-80.

⁴³⁸Ibid., pp.80-85.



Figure 55.
Making string figures, Easter Island. (Refer page 137)

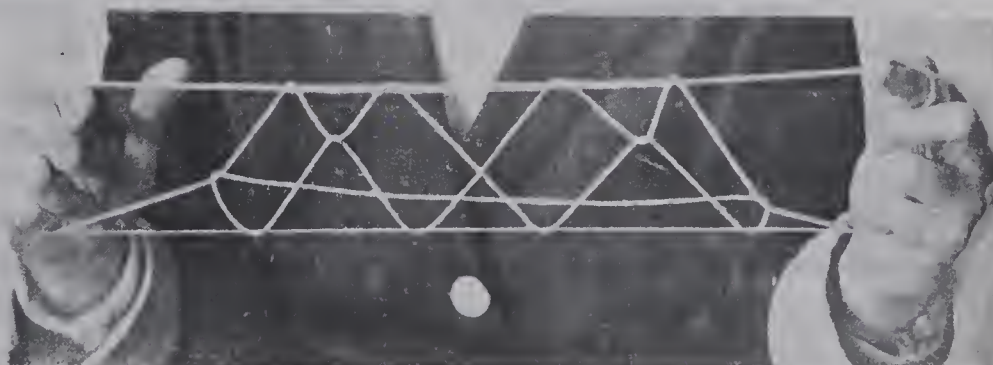


Figure 56.
Maori cat's cradle figure. (Refer page 137)

Two other authors who deserved mention for extensive material on this subject are Jayne⁴³⁹, who covered many of the countries of the world including Polynesia, and Culin⁴⁴⁰, who described many Hawaiian figures in great detail, and has been responsible for a set of Hawaiian patterns preserved in the Philadelphia Free Museum of Science and Art.

In New Zealand, the Maori also had many variations of this activity. Tregear⁴⁴¹ described two figures, "the ascent of Tawhaki the lightning god, to heaven, and the fishing up of the land by the Hero Maui." Tylor⁴⁴² described "Hine-nui-te-po, the goodess of Night, bringing forth her progeny."

73. String Tricks or Pu-kau-la.
Classification. SP:e,d*.

In Hawaii, Culin described the activity as:

A trick of twisting a cord around the fingers or tying it around the arm or leg in such a manner that while seemingly secure, it comes off with a slight pull. The name is from pu, and kau-la, a rope. Pu or puu among other meanings is explained by Andrews as "to cast or draw lots (a Hawaiian custom formerly in practice) by using a knotted string."⁴⁴³

Fornander also described a similar game as:

A long rope one fathom and over in length is required. It is a gambling game, even to one's person being wagered. To lock and to unlock the puzzle were two calls. Choose either locked or unlocked, and if the call was correct and so forth, the wager was won.⁴⁴⁴

⁴³⁹Carolynne Furness Jayne, String Figures and How to Make Them (New York: Dover Publications, 1906), pp.1-407.

⁴⁴⁰Culin, op.cit., pp.222-3. ⁴⁴¹Tregear, op.cit., pp.58-9.

⁴⁴²Tylor, op.cit., p.26. ⁴⁴³Culin, op.cit., p.224.

⁴⁴⁴Fornander, op.cit., p.214.

In New Zealand, Best⁴⁴⁵ described a Maori game of patokotoki and panokonoko as a simple game: "Each player was provided with a looped string and endeavoured to catch therein the extended finger of his opponent." Tregear⁴⁴⁶ described puzzles being prepared by using "cunning knots on a piece of cord."

Culin⁴⁴⁷ described a variation preformed in Hawaii, as: "String-cutting (o-ki-kau-la), one person prepares a string which another cuts at a place indicated, whereupon the first puts the two ends in his mouth and withdraws them united." Another variation he described as: "Wood-puzzle (pu-la-au), a cord is doubled and passed with a noose through two or three holes in a block of wood, the object being to remove the block while another person holds the ends of the cord."

74. Stone Dice or Lu-lu.
Classification.SP:e,c*.

Culin described this Hawaiian activity as:

Four disks of volcanic stone about an inch in diameter and marked one side [with holes representing the numbers 1, 2, 3, and 4.] are shaken in both hands and allowed to fall at random on the ground. These dice are marked with a cross, one with a central dot and the others with two, three, and four dots. The dots and crosses are painted red. Any number play, and each player has two throws, or rather, if any stone comes unmarked side up, he throws again. The spots count and the highest throw in a round wins; or the game may be played to a fixed number, as one hundred. If a player throws all marked faces up, it

⁴⁴⁵Best, op.cit., p.144.

⁴⁴⁶Tregear, op.cit., p.59.

⁴⁴⁷Culin, op.cit., p.223.

counts ten and he has another throw. The dice are called u-lu, the same as the stones used in mai-ka. Lu-lu means to shake.⁴⁴⁸

75. Hand Clapping or Pai-pai-li-ma.
Classification.SP:e,ex.

In Hawaii, Malo⁴⁴⁹ described pahipahi as being "played by slapping hands together, as in the game 'bean porridge hot, bean porridge cold,' etc." Bryan⁴⁵⁰ also called it pahipahi, while Culin described the game of pai-pai-li-ma as:

Two persons stand opposite each other and clap their hands in the same manner as played by children in the United States. The movements are as follows: (1) both clap hands, (2) clap left hands, (3) clap hands, (4) clap right hands, (5) clap hands, (6) clap each other's hands, and then repeat. This is described as a girls' game. They sing, keeping in time to the play.⁴⁵¹

76. Fiddlesticks or Fitshi.
Classification.SP,e,ex.

Hocart described the Fijian game of fitshi as:

A bundle of reeds (ngasau) is heaped on a log (ilango ni ngasau); the reeds, about one foot long, lie parallel and project at both ends. Players, two or more, sit on each side. One proceeds to flip (lisena) the end of each reed successively so as to drive it out the other end. He may not make more than one fall at a time and it must fall clear of the ilango. If he succeeds, he goes on; if he fails, he yields his turn to the next player; if one end of the reed rests on the ilango it is replaced; if two are knocked down the player keeps one and replaces the other. When all the reeds have been flipped off, each player counts his reeds; each reed is a point (kai).... In fitshi a player can spread out the reeds, as room is made in the progress of the game.⁴⁵²

⁴⁴⁸Ibid., pp.242-3.

⁴⁴⁹Maló, op.cit., p.233.

⁴⁵⁰Bryan, loc.cit.

⁴⁵¹Culin, op.cit., p.216.

⁴⁵²Hocart, op.cit., p.184.

77. Riddles, Word Play, etc.
Classification.SP:e.

Buck⁴⁵³ stated that the Maoris had many riddles (panga), word play activities (rotarota) and feats of story telling (korero tara) and that they "required no material aids."

In Fiji, B.Thompson described similar activities as:

The men amuse themselves sometimes with a game of guessing. One flings out his hand suddenly, and the other guesses the position of his fingers.

The chiefs sometimes play practical jokes by punning (vakarimbamalamala). Thus as the word ulaula means both to thatch a house and to throw short clubs at one another, the Mbau chiefs send to their vassals to come and ulaula. They come expecting to thatch a house, and find themselves received with a volley of throwing clubs.

Story telling is the principal amusement on long evenings, and the best story-tellers are professionals.⁴⁵⁴

In Samoa, G. Turner described several games as follows:

They also have guessing sports. One party hide, the other bundle up one of their number in a large basket covered over with a cloth. Then they, too, hide, all but three, who carry the basket to the other party, for them to guess who is in it. If they guess correctly, then they in turn get the basket to do the same. The successful guesses are counted for the game.

Like Samson and his companions, they were in the habit of amusing themselves with riddles. Let the following suffice as a specimen. I quote them:

1. A man who continues standing out of doors with a burden on his back. - Explanation.
 A banana tree with a bunch of bananas.

⁴⁵³Buck, (The Coming of the Maori), op.cit., p.244.

⁴⁵⁴B.Thompson, op.cit., p.331.

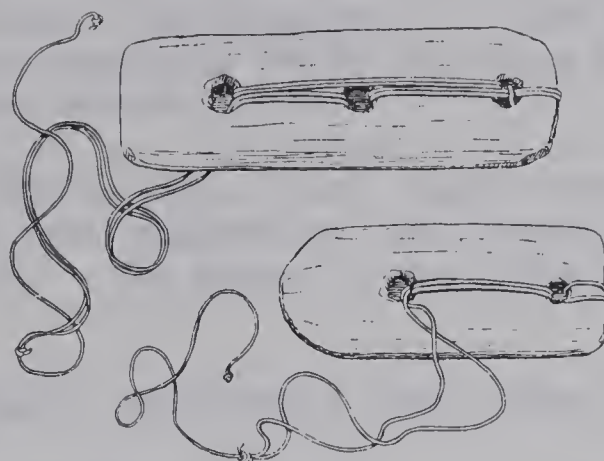


Figure 57.
Hawaiian Wood puzzles. (Refer page 148)

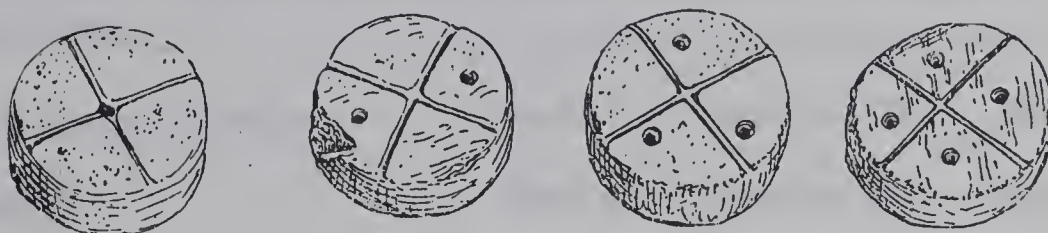


Figure 58.
Hawaiian stone dice. (Refer page 149)



Figure 59.
Tahitian swing (Refer page 153)

2. There are twenty brothers each with a hat on his head. - Explanation. A man's fingers and toes; the nails of which are represented as hats....
7. A man who has a white head, stands above the fence, and reached to the heavens.- Explanation. The smoke rising from the oven.⁴⁵⁵

In Hawaii, Culin⁴⁵⁶ described a game called "cocoanut-shell guessing or ko-ho-ko-ho-pu-ni-u," as: "A button of cocoanut-shell (pi-hi-ni-u) is concealed under one of two cups of cocoanut-shell, the object being to guess under which it is hidden."

OTHER GAMES ALREADY DESCRIBED WHICH HAVE ENIGMA AS A PRIMARY CHARACTERISTIC ARE:

78.	<u>Cup and Ball Games.</u>	Refer to Game No.35.	Page	80
79.	<u>Juggling.</u>	Refer to Game No.39.	Page	85
80.	<u>Jackstones.</u>	Refer to Game No.40.	Page	86
81.	<u>Marbles.</u>	Refer to Game No.38.	Page	83
82.	<u>Stone Hiding.</u>	Refer to Game No.51.	Page	124
83.	<u>Hide the Stone.</u>	Refer to Game No.49.	Page	121
84.	<u>Find the stone.</u>	Refer to Game No.50.	Page	122

F. GAMES AND ACTIVITIES WITH VERTIGO CHARACTERISTICS:

85. Swinging or Le-le-ko-a-li.
Classification.SP,C:v.

In Hawaii, Fornander described the activity as:

A rope eight fathoms long, sometimes ten fathoms and over, is fastened to a coconut tree. It makes a long high swing. At the

⁴⁵⁵G.Turner, op.cit., pp.215-7.

⁴⁵⁶Culin, op.cit., p.242.

time of swinging, the person swinging, either man or woman, is decently appparelled. Two persons pull the swing. When the swing has oscillated high the rider chants to make the swing more enjoyable. The owner of the swing has stipulated that a chant must be sung during the swinging.⁴⁵⁷

Malo⁴⁵⁸ gave a similar description but stated "a convolvulus vine, koali, was most often used," and "when permitted, youths of both sexes delighted to enjoy this sport together, the girl seated on the lap of the boy and facing him." Culin also described this double swing and stated:

A single rope is used, to which a stick is attached, across which one person sits, while another sits facing him astride his legs. The swingers are pulled by ropes from the opposite side. The name is from le-le, "to fly" and ko-a-li, the convolvulus, the vine formerly used for swings.⁴⁵⁹

Mitchell⁴⁶⁰ described the same activity and also stated that "jump rope" was popular.

In Tahiti, Ellis described the swing, or tahoro, as:

They were very fond of the tahoro, or swing, and frequently suspended a rope from the branch of a lofty tree, and spent hours in swinging backwards and forwards. They used the rope singly, and at the lower end fastened a short stick, which was thus suspended in a horizontal position; upon this stick they sat, and holding by the rope, were drawn or pushed backwards and forwards by their companions.⁴⁶¹

⁴⁵⁷Fornander, op.cit., pp.200-2.

⁴⁵⁸Malo, loc.cit.

⁴⁵⁹Culin, op.cit., pp.205-6.

⁴⁶⁰Mitchell, op.cit., p.4.

⁴⁶¹Ellis, op.cit., p.309.

In New Zealand two types of swings were found. Buck⁴⁶² and Best⁴⁶³ both described a simple or "bush swing" called tarere, and Best described it as:

Simply a natural one, being any aka (stem of climbing-plant) that was suitable for the purpose and occupied a desirable swinging-ground, which would mean any place where the performers could swing out over a gully or slope. These aka stems would be cut near the ground and utilized as swing-ropes, their upper parts having a firm grip on the branches far above.⁴⁶⁴

The other, more involved type of swing was called "giant stride morere or moari." Tregear described it as:

A pole was planted in the ground and several ropes fastened so as to hang from the top of it; each rope was seized by a pair of hands, and the holders running in a circle leapt from the ground and were carried through the air still clinging to the ropes. When, as often was the case, the pole was erected on the edge of a cliff, the excitement was greatly increased, as some of the party would be swinging out over the precipice.⁴⁶⁵

Buck⁴⁶⁶ and Best⁴⁶⁷ also gave another variation. The latter described it as: "our giant stride, was sometimes erected near deep water, so that when a player swung outward he could release his grasp on the rope and plunge into the water." Simple songs and jingles were nearly always associated with this activity.

⁴⁶²Buck, (The Coming of the Maori), op.cit., p.245.

⁴⁶³Best, op.cit., p.153.

⁴⁶⁴Ibid., pp.153-4.

⁴⁶⁵Tregear, op.cit., p.52.

⁴⁶⁶Buck, (The Coming of the Maori), op.cit., p.241.

⁴⁶⁷Best, op.cit., p.141.



Figure 60.
Maori "giant stride" swings. (Refer page 153)



Figure 61.
Maori "giant stride" swings. (Refer page 153)

In Fiji, the simple swing was mentioned by both B.Thompson⁴⁶⁸ and Williams and Calvert⁴⁶⁹. The latter described it as: "It consisted of a single cord either rope or strong vine, suspended from a tree, and having at its lower end a loop in which to insert a foot, as in a stirrup, or a knot, on which both feet rest."

86. Surfboards or Hei-hei-na-lu.
Classification.SP,E:v,ex*.

In Hawaii, surfboard riding was one of the most popular of the ancient sports. So much so, that it has survived and flourished to its dominant position in to-day's aquatic sports. Blake wrote of the sport in the following manner:

Hawaiian legends antedate the oldest written mention of surf riding, and the archives of the Bishop Museum contain many of these valuable stories, translated and in writing, carefully filed away behind locked doors.

The first migrators from the South Seas probably brought the idea of surfriding on boards with them. I feel, however, that the art reached its highest development in Hawaii.⁴⁷⁰

Of the event Buck wrote:

From remote times, Polynesians have shown their mastery of the waves (nalu) by riding them no matter how high or how rough.... In other parts of Polynesia the boards were comparatively short and were clasped with the arms while the breast rested on the aft end. In Hawaii the boards were larger and experts could kneel or stand erect upon them as they rode the forward slope of the high waves.

Hawaiian surf boards (papa he'e nalu) were divided into two classes, the shorter boards

⁴⁶⁸B.Thompson, op.cit., p.328. ⁴⁶⁹Williams and Calvert, loc.cit.

⁴⁷⁰Tom Blake, Hawaiian Surfboard (Honolulu: Paradise of the Pacific Press, 1935), p.5.



Figure 62.
Hawaiian surf-board riding. (Refer page 157)



Figure 63.
Ancient sketch of surf riding in Hawaii. (Refer page 157)

termed alaia and the longer termed olo.... Tom Blake who wrote a book on the Hawaiian surfboard (1935), notes that there is considerable variation in descriptions by various authors with regard to the wood from which the two types of boards were made. The consensus appears to be that the shorter alaia boards were originally made of koa or breadfruit wood and the longer olo boards were of wiliwili, which is very light.... The Bishop Museum collection consists of 25 boards ranging from a child's board of breadfruit wood, 34.25 inches long, weighing 2 pounds 10 ounces to a modern redwood board, 17 feet 2 inches long, weighing 174 pounds....

The old boards were dubbed out with stone adzes from a section of tree trunk of the required diameter. They were then rubbed down with rough coral to remove the adz marks and polished with 'oahi stone rubbers, much as canoe hulls were smoothed. They were stained a dark color with the root of the ti plant (mole ki) or the juice from pounded Kukui bark (hili).... When the stain was dry, a dressing of kukui oil was applied as the finishing process.

Surfboards were used throughout the island on parts of the coast where waves were high and had a long roll before breaking. The short alaia boards could be used at most times on waves close to the shore, but the long olo boards required high waves to prevent them from digging into the surface instead of riding freely on the forward slope. The olo riders lay on their boards and paddled them with the hands, avoiding breaks in the waves, until they got well behind the line of breakers. There they awaited the suitable waves which came in series. Still paddling, with the board directed toward the shore, they usually let the first two waves pass and selected the third or fourth. As the board rose on the front surface of the selected wave, they paddled to keep in position and, all going well, the wave carried them along on its front surface. The rider could remain in the prone position termed kipapa, but experts were not content with this. By holding firmly to the sides of the board, the body could be drawn into a kneeling position; or by carrying the legs forward, a sitting position could be assumed.

By straightening up from the kneeling position, the body was carried to the final erect position. The board could be directed into a slide to the right or left by leaning the weight to that side or trailing the foot in the water to act as a rudder. With the rider erect, the board continued forward on the front surface of the wave, and it was advisable to keep toward the base of the wave. The slide to the right or left was not only exhilarating but it was used to get out of the way if the wave started to break behind the board. Perfect balance despite the changing directions of the board marked the expert surf rider.⁴⁷¹

Brigham⁴⁷² described the event and stated "the first one arriving at the beach won the race. The riders sometimes raced also to the kulana nalu or starting points.... Men and women both took in this delightful pastime." Malo⁴⁷³ described the gambling side of the sport and stated: "Surf riding was a national sport of the Hawaiians, on which they were very fond of betting, each man staking his property on the one he thought to be most skillful." Bryan⁴⁷⁴ gave an excellent description of the two types of boards, while Fornander gave the names of the surfboards and the surfs as:

The board is alaia, three yards long.
The surf is kakala, a curling wave,
terrible, death-dealing.

The board is olo, six yards long.
The surf is opuu, a non-breaking wave,
something like calmness.⁴⁷⁵

⁴⁷¹Buck, (Arts and Crafts of Hawaii), op.cit., pp.384-6.

⁴⁷²Brigham op.cit., pp.55-6. ⁴⁷³Mallo, op.cit., p.223.

⁴⁷⁴Bryan, op.cit., p.50. ⁴⁷⁵Fornander, op.cit., p.206.

Malo⁴⁷⁶ also described a chant used to invoke the waves to rise and stated that another method was "to take several strands of the sea-convolvulus vine and swinging it around the head lash it down unitedly upon the water until the desired undulating waves were obtained, at the same time chanting for a response to their effort." Russell wrote:

Surfboarding was popular almost everywhere in tropical Polynesia but in the south only a short board was used. It was only the Hawaiians who stood on their boards which were about six feet in length. The old Hawaiian hacked his surf board out of a tree trunk and polished it with coral rock and sand. He tended it with loving care oiling it after use and often putting it carefully away wrapped in cloth.⁴⁷⁷

In New Zealand, Buck⁴⁷⁸ stated that surf riding was practiced by the Maori but was not as highly developed as surf riding in Hawaii. He described the activity as:

Surf riding (whakaheke ngaru) was conducted on a board termed kopapa by coastal tribes with a suitable shore line. The term kopapa was also applied to small canoes used in surf riding. The pastime was not so well developed as in Hawaii and the surf boards do not seem to have acquired any organized shape.⁴⁷⁹

Both Stumpf and Cozens⁴⁸⁰ and Best⁴⁸¹ also described the use of the canoe and surf board but further information appeared to be lacking.

⁴⁷⁶Ibid.

⁴⁷⁷Russell, op.cit., p.144.

⁴⁷⁸Buck, (The Coming of the Maori), op.cit., p.238.

⁴⁷⁹Ibid., p.241.

⁴⁸⁰Stumpf and Cozens, (The Maoris), op.cit., pp.213-4.

⁴⁸¹Best, loc.cit.



Figure 64.
Old surf-board in Bishop Museum. (Refer page 157)

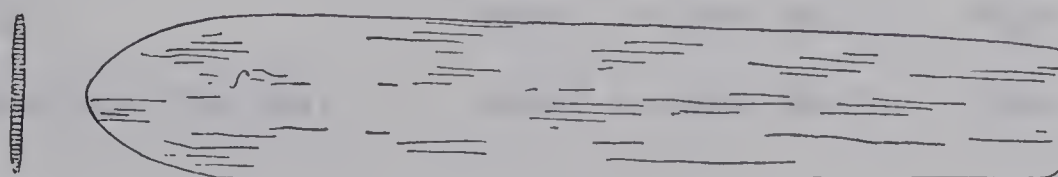


Figure 65.
Hawaiian surf-board (Refer page 157)

In Tahiti, Ellis⁴⁸² described the sport and stated "their surfboards are inferior to those of the Sandwich Islander," or Hawaiian Islanders, as they are now called. He described their small boards as papa faahee and said they showed great ability in their use.

In Samoa, G. Turner⁴⁸³ stated "swimming in the surf on a board, and steering little canoes borne along on the crest of a wave towards the shore, are favourite juvenile sports." However Churchill stated, when talking about surf-riding:

As practiced in Samoa, this thrilling sport is confined to canoes; no one uses the surf board, which is commonly employed in this amusement by the Hawaiians. Samoans look upon the board as much too easy and secure a means of surf-riding, to give them the full amount of pleasure; they say it is fit only for young children [which may have been the case]. It is easy when one knows how; rather terrifying until one has learned the art. But surf-riding in canoes is not an easy accomplishment to acquire; it never loses the spice of danger, no matter how expert one may become at handling the canoe in such circumstances.⁴⁸⁴

In Niue, Loeb⁴⁸⁵ described surf-riding as fakatu-peau and stated it "was never indulged in to the same extent as in Hawaii and riding standing was not practiced," and that contests were organised in surf-riding.

OTHER GAMES ALREADY DESCRIBED WHICH HAVE VERTIGO AS A PRIMARY CHARACTERISTIC ARE:

- | | | | |
|----------------------------------|----------------------|------|-----|
| 87. <u>See-Saw.</u> | Refer to game No.29. | Page | 59 |
| 88. <u>Stilts.</u> | Refer to game No.32 | Page | 69 |
| 89. <u>Leaping into the sea.</u> | Refer to game No.52. | Page | 124 |

⁴⁸²Ellis, op.cit., pp.304-5. ⁴⁸³G.Turner, op.cit., p.217.

⁴⁸⁴Churchill, op.cit., pp.566-7. ⁴⁸⁵Loeb, op.cit., p.118.

G. GAMES AND ACTIVITIES WITH IMITATION CHARACTERISTICS.

90. Sham Fights.
Classification.C,P:i.

In Hawaii, Handy⁴⁸⁶ described sham fights as being part of the program of sports and other activities which were indulged in during religious festivals and holidays. He also stated that "sham fighting... practiced at this time in both Samoa and Tahiti, served to drive away evil spirits when their influence was believed to be lingering about a place following a death."

Ellis also described sham fights in Tahiti and said "they were connected with displays of a naval or military parade." He described one as follows:

The fighting men in both exhibitions, wore the dress and bore the arms employed in actual combat. They also performed their different evolutions, or plans of attack and defence, advance and retreat.... In their mock engagements, they threw the spear, thrust the lance, parried the club, and at length, with deafening shouts, mingled in general promiscuous struggle. Some of the combatants were thrown down, others captured, and the respective parties retreated to renew the contest.⁴⁸⁷

Ellis⁴⁸⁸ also described a naval sham fight similar to the military affair. Russell⁴⁸⁹ described "mimic battles" as taking place "usually with blunted spears, or improvised weapons but at other times the 'armies' stood one another off and hurled stones, nuts and any other missiles they could lay their hands on." He also stated "the only difference between a mimic battle and the real thing was that in a sham fight you laughed heartily at your injuries."

⁴⁸⁶Handy, (Polynesian Religion), op.cit., pp.306-7.

⁴⁸⁷Ellis, op.cit., p.295. ⁴⁸⁸Ibid., pp.295-6.

⁴⁸⁹Russell, op.cit., p.143.

In New Zealand, Del Mar described a Maori practice as:

Warriors wearing full war dress and carrying the usual weapons, went through the different movements of combat as practice. Sham fights called for all the attributes of a warrior, and where the fights were played by children, the adults observed so that they could single out the most agile and skilful as possible top warriors for future campaigns.⁴⁹⁰

Buck⁴⁹¹ also wrote: "children were armed with a flax flower stalk (korari) and were taught to spar by their parents and, when older were taught the strokes and parries of the various weapons as well as the accompanying footwork of the expert warrior.

In Fiji, both Williams and Calvert⁴⁹² and B.Thompson⁴⁹³ called sham fights by the name of veiyama and the latter stated that they were discontinued as "serious injuries sometimes resulted."

In Samoa, Stair⁴⁹⁴ stated that sham fights, among other activities, were always included after religious feasts, and G. Turner⁴⁹⁵ described "reviews and sham-fighting" as being part of their "sundry other amusements."

In the Society Islands, Handy⁴⁹⁶ described naval reviews as part of their ancient activities.

⁴⁹⁰Del Mar, op.cit., p.104.

⁴⁹¹Buck, (The Coming of the Maori), loc.cit.

⁴⁹²Williams and Calvert, loc.cit.

⁴⁹³B.Thompson, loc.cit. ⁴⁹⁴Stair, op.cit., p.137.

⁴⁹⁵G. Turner, loc.cit.

⁴⁹⁶Handy, (Society Islands Culture), op.cit., p.57.

91. Jumping Jack, Puppet or Karetao.
Classification.S,SP:i.

This activity appeared to be peculiar to the Maori as no data was found which gave evidence of this activity on any other Polynesian Island. Buck called the activity karetao, karari, toko raurape or jumping jacks, and described it as:

Marionettes carved in wood in human form with the legs resting on a base which was narrowed and prolonged downwards to form a hand-grip. They were about 15 inches in total length and made of one piece of wood but with the two arms separate. The arms were perforated at the upper ends and cords passed through and stopped by overhand knots. The cords were then passed through holes in the shoulders of the figure and tied together at the back.... Some of the figures were elaborately carved, the face being embellished with a full tattooing design. The operator held the hand-grip with the left hand and manipulated the strings at the back with the right hand to cause the arms to make various motions on their loose joints. The performance was enhanced by quivering the figures with the left hand and making the various motions keep time with a chant (oriori karetao) as if performing a haka posture dance. When not performing, the strings were drawn taut and tied around the waist. I know of no records of similar figures from other parts of Polynesia and it would appear that the karetao was another Maori invention.⁴⁹⁷

This activity was described by both Tregear⁴⁹⁸ and Best⁴⁹⁹ but added little information to the data from Buck.

92. Horse Riding or Ho-lo-li-o.
Classification.SP:i.

Culin⁵⁰⁰ described ho-lo-li-o as an Hawaiian activity. The described activity may be authentic but the name of "horse riding" was a strange one for a Polynesian Island, where it was very doubtful if horses existed in ancient times.

⁴⁹⁷Buck, (The Coming of the Maori), op.cit., pp.248-9.

⁴⁹⁸Tregear, op.cit., p.55. ⁴⁹⁹Best, op.cit., p.157.

⁵⁰⁰Culin, op.cit., p.206.



Figure 66 .
Jumping Jack.
(Refer page 166)

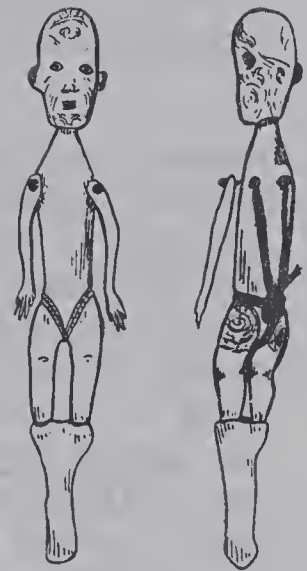


Figure 67.
Maori puppet or jumping jack.
(Refer page 166)

The description simply stated "boys play 'horse', riding astride a stick," and it probably was just a similar game to the European one of the same design.

93. Kites or Lu-pe .
Classification.C,SP:i,ex,v*.

Pukui⁵⁰¹ stated "kite-flying is an ancient and favorite sport in Hawaii," and also that they had many and varied chants which were performed during the stages of kite flying. Culin gave an excellent description of the types and construction of these kites as follows:

Kites are made of kapa cloth with sticks (la-au lu-pe) of wi-li-wi-li wood. Six forms were described by my informants: lu-pe ma-nu, or "bird kite"; lu-pe hui-na-ha, or "four-sided kite"; lu-pe le-le; lu-pe-ho-ku "star kite"; lu-pe ma-hi-ni, "moon kite"; and lu-pe ka-na-pi, "centipede kite."

The first has a bow of bamboo and two sticks crossed at right angles; the triangles above and below the bow are bound with cord (kau-la ku-i-na); tails (hu-e-lo, we-lo-we-lo) are fastened at the sides, but none at the extremity. The four sided kite has two crossed sticks with two binding sticks and is lashed with cord about the edges; it has a long tail with strips of kapa attached called kai-kai-a-po-la.... The lu-pe ho-ku, or "star kite," has four sticks crossed in the middle, the edge being formed by a cord tied with a radial cord between each of the sticks. The lu-pe ma-hi-ni or "moon kite," has three sticks, a long vertical one, crossed by two parallel horizontal sticks, and an exterior hoop of bamboo. Both star and moon kites have tails (kai-kai-a-po-la).

The kite strings (a-ho) are made of kapa. Men fight kites, one man entangling (hoo-wi-u-wi-u) his line with another's and endeavoring to bring down his antagonist's kite. They bet on the results. The kite called lu-pe le-le is said to be used invariably for this purpose.⁵⁰²

⁵⁰¹Pukui, op.cit., pp.209-11.

⁵⁰²Culin, op.cit., pp.224-6.



Figure 68.
Kite flying in Society Islands, tail is 28 feet long. (Refer page 168)

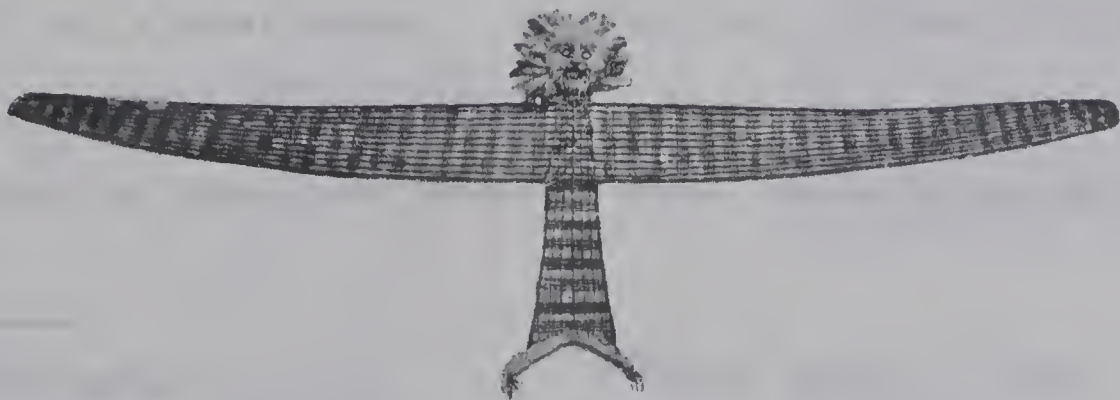


Figure 69.
A Maori Kite. (Refer page 168)

Fornander described the activity and stated:

Kapa makes good material for the body of a flying kite, with hau for its cross-sticks. The kite is a fathom long and four and a half feet in width. Twenty times forty fathoms [1600 yards] of cord are used, the tail being fifteen fathoms long. To start it two men are required to hold it, with a wooden stake. When the kite flies it is lost sight of in the sky and wet with mist [Kapa kites of early days, wet by moisture in the clouds, became ragged and torn]; the frame is not so. If a cord breaks the kite drops into the sea.⁵⁰³

Mal⁵⁰⁴ described kite flying as "a pastime that was dear to the Hawaiian heart, the practice of which recurred with the regularity of the seasons." Mitchell called kites ho'olele lupe and described four types:

Lupe lā, "sun kite" or round kite.
Lupe mahina, "moon kite" or crescent moon in shape.
Lupe manu, "bird kite" or kite with wings.
Lupe maoli, "genuine kite" or kites shaped like European kites.⁵⁰⁵

Bryan⁵⁰⁶ and Alexander⁵⁰⁷ both described kites as being strictly a children's game. Luomela⁵⁰⁸ described how kites were part of many legends and related several stories about "Maui's kites," the latter being one of the Hawaiians many heroes.

In Tahiti, Russell⁵⁰⁹ described kite flying as a children's game while Ellis⁵¹⁰ stated: "The boys were very fond of uo, or kite, which they raised to a great height. The Tahitian kite was different in shape to the kites of the English boys. It was made of light native cloth, instead of paper, and formed in shape according to the fancy of its owner.

⁵⁰³Fornander, loc.cit.

⁵⁰⁵Mitchell, op.cit., pp.3-4.

⁵⁰⁷Alexander, loc.cit.

⁵⁰⁹Russell, loc.cit.

⁵⁰⁴Mal⁵⁰⁴, op.cit., p.234.

⁵⁰⁶Bryan, op.cit., p.51.

⁵⁰⁸Luomela, op.cit., pp.78-9.

⁵¹⁰Ellis, op.cit., p.310.



Figure 70.
A Maori kite, Bay of Plenty.
(Refer page 168)



Figure 72.
A Maori kite. (Refer page 168)



Figure 71.
A Maori kite, Bay of Islands.
(Refer page 168)

Buck stated:

In New Zealand, they were enjoyed by young and old as a pastime but priests sometimes used them for divination and interpret omens from their flight. The general Maori name was manu or manu tukutuku (manu, bird; tukutuku, to play out the cord). A number of different forms were made: two were named after birds, a manu totoriwai (robin) and manu kaka (parrot); small ones for children, manu paitiiti; triangular shaped with a front apical plume, manu taratahi; lozenge-shaped and oval after the flounder, manu patiki; priests' kites for divination, manu whara; and kites made from the bark of the paper mulberry, manu aute.

In Polynesia, the kite frames were covered with bark cloth but in New Zealand, though some manu aute were made, the paper mulberry was too restricted in distribution to form a general covering material. The most common substitute was the dry leaves of the raupo which were tied to the framework of light rods. Very large kites were made with a body furnished with a human head, two long wings, and two attenuated legs with four claws as in the specimens in the British Museum. One in the Auckland Museum made by the Arawa tribe in the 'sixties' is 12 feet across the wings. Though tails of bunches of feathers are stated to have been used with some kites, the large specimens in the British and Auckland Museums are without them. The cords (aho tukutuku) for children's kites were formed of strips of flax tied together but the better kites were provided with long cords of three-ply twisted flax fibre. The cords were attached to the middle of the body framework.⁵¹¹

Fornander⁵¹² described the aute kite and said "it was often formed in the shape of a man, and had spells fastend to it so as to rattle as it moved," and that "the kite had its own charm (karakia) to be recited in order to raise it in the air, and songs were sung to the flying plaything as it soared on high. Another interesting point was described by Fornander as follows:

⁵¹¹Buck, (The Coming of the Maori), op.cit., p.248.

⁵¹²Tregear, op.cit., p.51.

Sometimes the aute kite was used as a means of sending a message. The owner waited till a fair wind sprung up and then set free a kite that passed in the direction of the tribe it was wished to communicate with, and those receiving it understood perfectly the message it was meant to convey.⁵¹³

Best⁵¹⁴ also described the various aspects of kite flying and stated: "kite-flying contests were held by our Maori folk in former days, and great interest was taken in such exhibitions."

Of Samoa, Buck⁵¹⁵ stated "kites were flown in various parts of Polynesia but they were missing in Samoa."

In the Manganian Islands, Buck⁵¹⁶ described the mythical origin of kite flying and stated: "The sport was a chiefly one. The object, as in the original match between the gods, was to see whose kite could fly the highest. Incantations to give success were chanted and songs were composed."

In Rotuma, Gardiner wrote:

The kite also is not unknown. I saw one in Juju which was evidently of European design; another old one I saw in Losa was quite round and made of an old mat, somewhat bellied, on a frame formed by the midrib of the cocoanut leaf. It had the remains of a tail, pieces of cocoanut leaf tied at equal intervals on a string of sinnet.⁵¹⁷

In the Society Islands, Handy⁵¹⁸ did not describe the kites but stated it was one of their "minor forms of amusement or sport."

⁵¹³ Ibid., p.52.

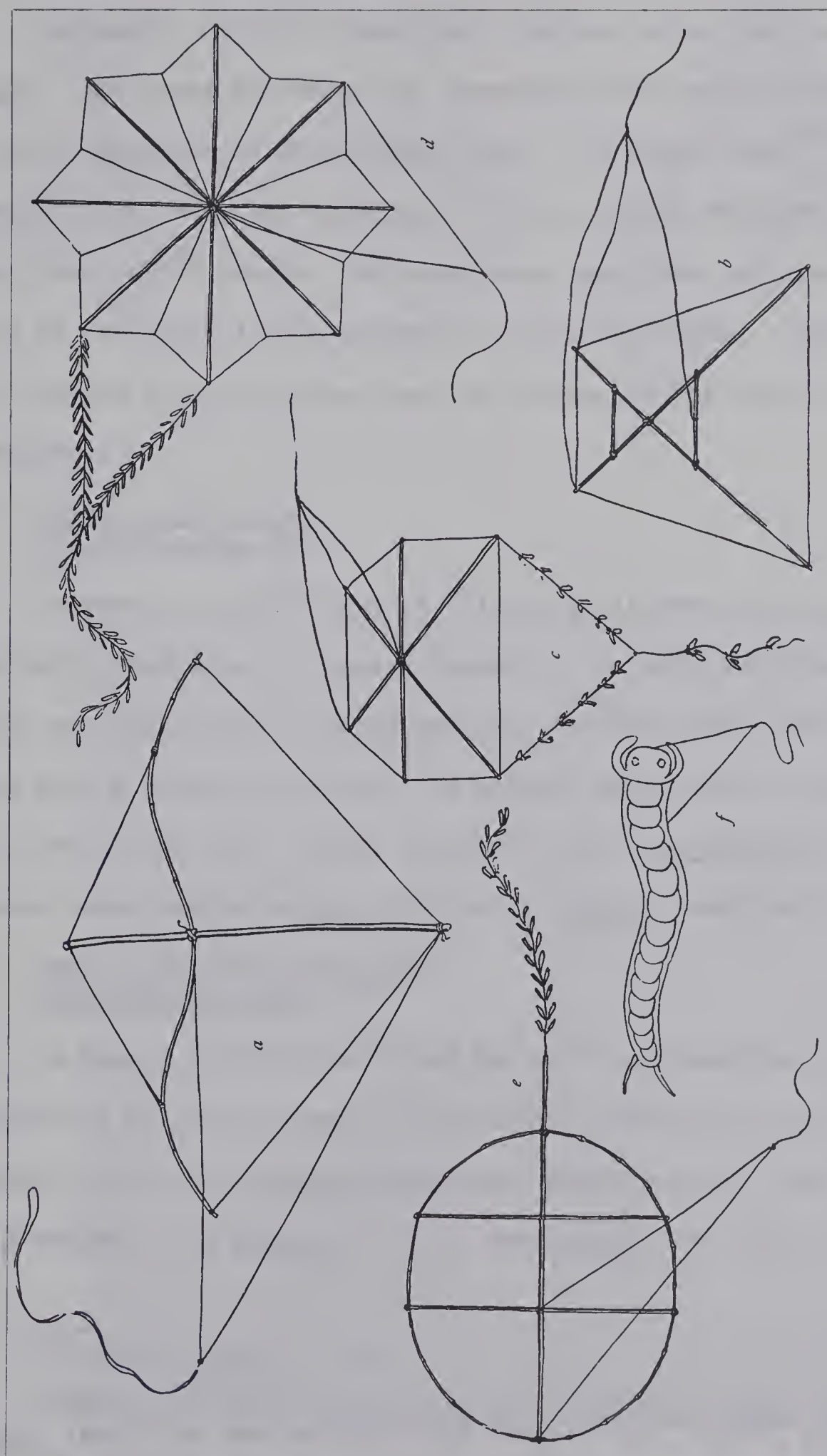
⁵¹⁴ Best, op.cit., p.157.

⁵¹⁵ Buck, (The Coming of the Maori), loc.cit.

⁵¹⁶ Buck, (Manganian Society), op.cit., p.149.

⁵¹⁷ Gardiner, op.cit., pp.487-8.

⁵¹⁸ Handy, (Society Islands Culture), op.cit., p.65.



HAWAIIAN KITES

a. *Lu-pe ma-nu*—bird kite (No. 21,454, Museum of Archeology, University of Pennsylvania); b. *Lu-pe hu-i-na-ha*—square kite; c. *Lu-pe le-le*; d. *Lu-pe ho-ku*—star kite; e. *Lu-pe ma-hi-ni*—moon kite; f. *Lu-pe ka-na-pi*—centipede kite. The last four are from native drawings.

Figure 73.
Hawaiian kites. (Refer page 168)

94. Wind or Pin Wheel or Hu-i-la-ma-ka-ni.
Classification.SP;i,ex.

In Hawaii, Culin⁵¹⁹ described this as "a toy made of paper or kapa. The paper pin-wheel is identical with that of Europe, but that of kapa was of a different form." In Samoa, Mead⁵²⁰ described the activity as being one indulged in by the little children, and in Rotuma, Gardiner²²¹ states: "On windy days they [the children] may perhaps be seen with little windmills by the sea shore. These are made of two crossed bits of coconut leaf on the end of the midrib of one of the leaflets."

95. Dolls or Kii-pe-pe
Classification.SP:i.

In Hawaii, Culin⁵²² stated "little girls make dolls out of stones which they wrap in banana leaves." He also described another activity as "paper play or pe-pa pa-a-ni, children fold paper (pe-pa) or kapa into a variety of shapes, as a bird, ma-nu, which glides down like a bird in the air. Other forms are a box (po-ho-kui-i).... They also weave strips of kapa into mats, mo-e-na, and braid."

96. Leaf Canoes or Au-we-lau-ki
Classification.SP:i.

In Hawaii, both Bryan⁵²³ and Culin⁵²⁴ mentioned the activity as strictly a children's game and the latter described it as: "Children fold up ki (Dracena terminalis) leaves and sail them. The name is derived from au-waa, a fleet, and lau-ki, the leaf of the ki plant.

⁵¹⁹Culin, op.cit., p.221.

⁵²⁰Margaret Mead, Cooperation and Competition Among Primitive Peoples. (New York: McGraw Hill Book Company Inc., 1937), p.309.

⁵²¹Gardiner, op.cit., p.487. ⁵²²Culin, op.cit., pp.219-20:

⁵²³Bryan, loc.cit.

⁵²⁴Culin, op.cit., p.219.

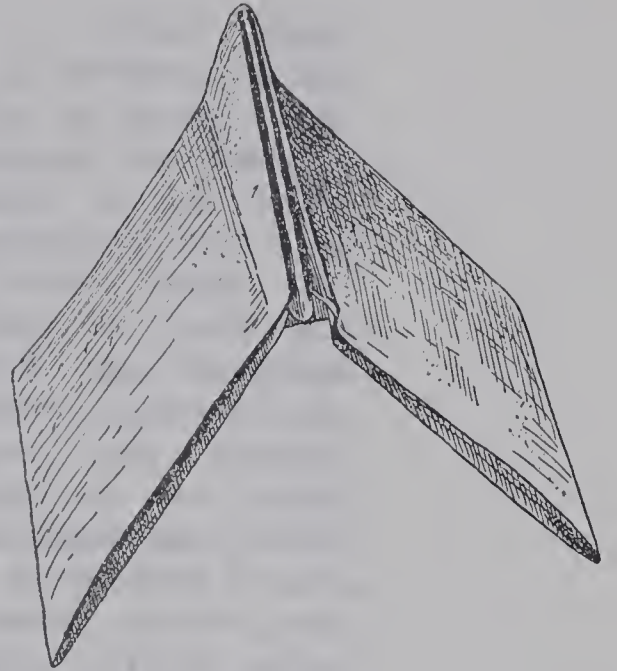
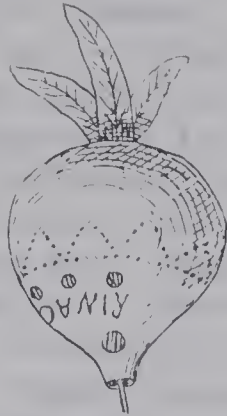
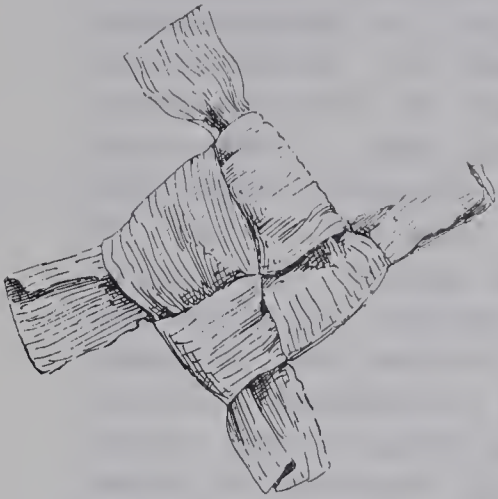


Figure 74.
Hawaiian pin wheel. (Refer page 175)

Figure 75.
Hawaiian paper bird. (Refer page 175)



Figure 76.
Hawaiian puppets or dolls. (Refer page 175)

In Tahiti, Ellis described the activity as:

Another amusement which appears to afford high satisfaction to the children of the islanders, is the construction of small canoes, boats, or ships, and floating them in the sea. Although they are rude in appearance, and soon destroyed, many of the boys displayed uncommon ingenuity in constructing this kind of toy. The hull is usually made with a piece of light wood of the hibiscus, the cordage of bark, and the sails of either of the leaflets of the cocoa-nut tree, or the native cloth. The owners of these little vessels frequently go in small parties, and, taking their small-craft in their hands, wade up to their waist or arm-pits in the sea, and sometimes swim still further out; and, then launching their miniature floats, consisting of ships, brigs, sloops, boats, canoes, etc. return towards the shore. They usually fix a piece of stone at the bottom of the little barks, which keeps them upright; and as the wind wafts them along the bay, their owners run along up to their knees in the sea, splashing and shouting as they watch their progress.⁵²⁵

In New Zealand, Best⁵²⁶ described a Maori activity as: "Toy canoes for racing were made from Phormium leaves. Boys were interested in constructing small models of fortified villages."

In Fiji, B.Thompson⁵²⁷ stated the children "have no toys except miniature canoes, which they make for themselves as they want them." L.Thompson⁵²⁸ also described the activity as, "their favorite water sport is playing with toy canoes made of coconut husks with a sail of a large leaf. Each toy boat has a name. The children talk to their canoes and frequently they have canoe races at low tide."

⁵²⁵Ellis, op.cit., pp.307-8.

⁵²⁶Best, op.cit., p.157.

⁵²⁷B.Thompson, loc.cit.

⁵²⁸L.Thompson, loc.cit.

H. GAMES AND ACTIVITIES WITH EXULTATION CHARACTERISTICS

97. Firebrand Gliding or O-i-li-pu-le-lo.
Classification.C:ex,i*.

In Hawaii Bolton⁵²⁹ and Culin both mentioned the practice of o-i-li-pu-le-lo. The latter gave a full description as:

A former sport of the chiefs was to send lighted firebrands down a pa-li or precipice, at night. On dark, moonless nights from certain points of these precipices, where a stone would drop sheer into the sea, the operator takes his stand with a supply of pa-pa-la sticks (a light and porous indigenous wood), and, igniting one, launches it into space. The buoyancy of the wood and the action of the wind sweeping up the face of the cliffs, cause the burning branch to float in mid-air rising or falling according to the force of the wind, sometimes darting far seaward, and again drifting towards the land. Firebrand follows firebrand, until, to the spectators who enjoy the scene in canoes upon the ocean hundreds of feet below, the heavens appear ablaze with shooting stars, rising and falling, crossing and recrossing each other in a weird manner. So the display continues until the firebrands are consumed, or a lull in the wind permits them to descend slowly and gracefully into the sea.⁵³⁰

98. Bullroarer or O-e-o-e.
Classification.C,SP:ex.

In Hawaii, Culin described it as:

This is made of wood, with a hole in one end through which is passed a cord with which it is whirled. It is known to my informants as a toy. They gave as another name, ko-wa-li-wa-li. Andrews gives ko-he-o-he-a as "an instrument to assist in mourning or wailing along with other sounds."⁵³¹

In New Zealand, Tregear gave a description of the Maori bull-roarer called pirorohu or kororohu as:

⁵²⁹Bolton, loc.cit.

⁵³⁰Culin, op.cit., p.214.

⁵³¹Culin, op.cit., pp.220-1.

to a point at each end. A cord was fastened through two small holes bored crossways in the middle of the piece of wood about a quarter of an inch apart. The instrument was used by twisting the string and letting it unwind itself, this causing a buzzing or whizzing noise. The large bull-roarer (purerchua or mamae) was made of hard wood (matai) eighteen inches long, and, like the other, tapered to points at the ends. Its cord was about four feet in length, and was fastened to a stick about three feet long by which the bull-roarer was whirled around, making a booming or humming noise. It was believed that the spirit (of the operator) caused the noise. In some parts of the country bull-roarers were used when a deceased chief was lying in state, and the sound was supposed to drive off evil spirits.⁵³²

Best⁵³³ also stated: "The rude instrument termed a "bull-roarer" was used in at least one district in a curious ceremony performed in order to cause rain to fall.

Culin⁵³⁴ also described an Hawaiian variation as the buzz or po-ka-kaa as being "made of a disk of bark (hau) perforated with two holes through which is passed. This may be the same instrument as mentioned by Tregear above.

99. Dragon Fly Catching or Ho-pu-ho-pu-na-lo.
Classification.SP:ex.

In Hawaii, Culin described ho-pu-ho-pu-na-lo as:

Children catch dragonflies, pi-nau, in a net, crying out the number, one, two, three, four, and so on, as they catch them. The one who first gets ten wins. All then stop; and putting the dragonflies in their handkerchiefs, count "one, two, three," and release them.⁵³⁵

Another variation described by Culin⁵³⁶ was: "dragonfly-flying or lé-le-pi-nau, children catch dragonflies and tie them to a string to see which can fly farthest."

⁵³²Tregear, op.cit., pp.54-5. ⁵³³Best, op.cit., p.164.

⁵³⁴Culin, op.cit., p.220. ⁵³⁵Ibid., p.219.

⁵³⁶Ibid.



Figure 77.
Hawaiian leaf canoes. (Refer page 175)

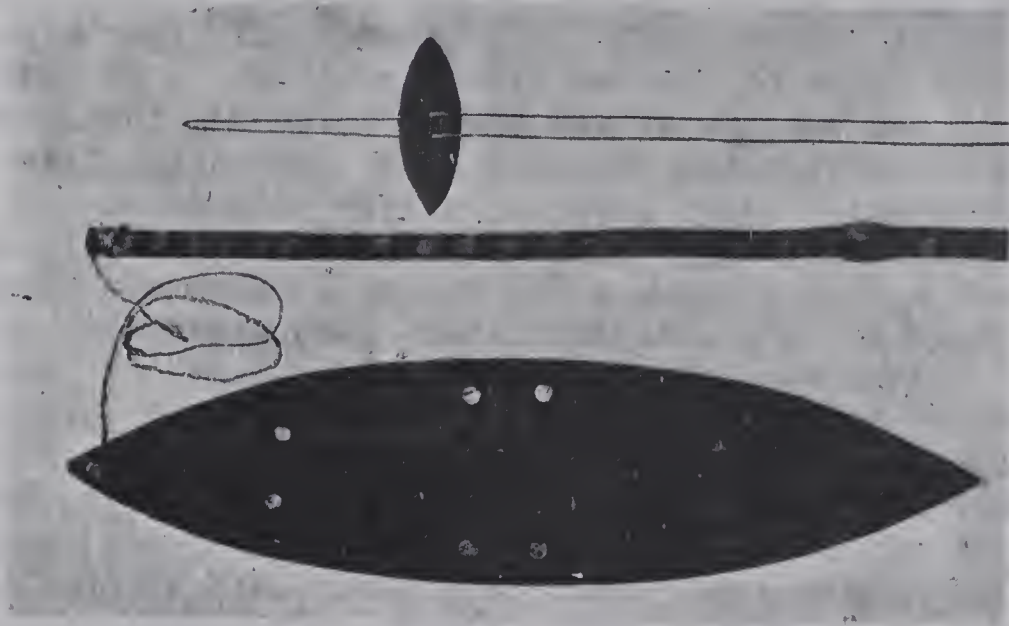


Figure 78.
Maori bull-roarer and whizzer. (Refer page 178)



Figure 79.
Wand used in the game of Ume. (Refer page 181)

100. Prop Open the Eyes with Sticks or O-le-ha.
Classification.SP:ex.

In Hawaii, Culin⁵³⁷ described o-le-ha as "an amusement consisting in placing a stick about two inches long, between the eyelids to prop them open. The name means, primarily, to set or fix the eyes."

In Tahiti, Ellis stated:

The teatea mata was a singular play among the children, who stretched open their eyelids by fixing a piece of straw, or stiff grass, perpendicularly across the eyes, so as to force open the lids in a most frightful manner.⁵³⁸

101. Adult Game of Attraction or Ume.
Classification,SP,C:ex.

This game, from all data collected on the subject was peculiar to Hawaii. Buck described it as:

The game of 'ume derived its name from the term 'ume, to draw or attract. It was played by the commoners and by chiefs of lower degree in the house (hale'ume) set apart for the purpose.... The people seated themselves in a circle and were called to order by the 'president' of the assembly who was termed the ano-hale. A man called the mau came forward and chanted a gay song, at intervals waving a long wand (the maile) trimmed with bird feathers.... The mau passed around the circle and touched a man and a woman with his wand, the pair so designated went outside and enjoyed themselves. Emerson states that the selection of couples was not left to the mau, rather that the man indicated his choice by putting something of value in the hand of the mau to give to the woman to attract (ume) her toward him. Evidently the couple had to go outside, though the woman possessed the power to veto. If she exercised this power, they returned to the house....

The, maile used in 'ume differs from the wands with a dog-skin tuft used in the game of no'a.⁵³⁹

⁵³⁷Ibid., p.217.

⁵³⁸Ellis, op.cit., pp.308-9.

⁵³⁹Buck, (Arts and Crafts in Hawaii), op.cit., pp.367-8.

Fornander also described the activity as:

The ume. It is an attraction of a man and of a woman. Here is a description of it. A long piece of wood, four yards long, is adorned with chicken feathers. The wood is called hau. The ume is performed after the cessation of the kilu [described in the next game, No.102.] , because the people are still together at the time, no one going away.... The man who performs the ume is one who has an agreeable voice for chanting. He takes hold of the piece of wood and goes through the assembly, searching for a comely woman and a comely man. When he has found these in his search, he chants....

After chanting, the pole is brought in contact with the man and the woman. Subsequently the man and the woman rise and go to a sleeping place. They remain from evening to daylight. In this entertainment a husband, or a wife, is lost to another. If they love [each other] they join together. In these days it would be marriage. In this the husband is not offended, with his wife, neither the wife with her husband. It is merely a matter of enjoyment at the time. Thus this man keeps on his work of ume upon all the persons inside, both men and women.

This is not done, however, to those of homely faces in appearance; or to the good-looking is the ume treated.⁵⁴⁰

Malo⁵⁴¹ described the game and added that "owing to these practices, the affections of the women were often transferred to the man, her partner,⁵⁴² so that the man would not return to his former wife, nor the woman to her former husband." Bryan⁵⁴³ stated the game was played sometimes around a bonfire," while Bolton⁵⁴⁴ described it as a game of "impure nature."

⁵⁴⁰Fornander, op.cit., pp.194-6. ⁵⁴¹Malo, op.cit., pp.214-5.

⁵⁴²If a man took his new wife to his home, it was up to the new favorite to say whether the former woman might stay on the premises. The children belonged to the man.

⁵⁴³Bryan, op.cit., p.50.

⁵⁴⁴Bolton, loc.cit.

102. Kilu (Aristocratic Form of 'Ume).
Classification.C,SP:ex,d*.

Like Ume this game of kilu was also peculiar to Hawaii. Buck described it as:

The fame of kilu was the aristocratic form of 'ume, and none but the ali'i was allowed to take part. The game takes its name from the kilu dishes which were some of the objects used in the game. According to Malo [pp.216-7], the kilu was a gourd which has been cut obliquely from end to end.... or it was made from an egg-shaped coconut shell cut obliquely from one side of the point to the eyes, thus making a somewhat one sided dish. The other objects used were conical blocks of heavy wood, broad at the base to keep them upright....

The qualified aristocracy, male and female, gathered in the recreation house which could be used for both kilu and 'ume, on different nights however. The men sat at one end and the women at the other. The players usually consisted of five of each sex on opposite sides and a tally keeper for each side termed the helu'ai (helu, to count; 'ai, the score). The players sat in front of the spectators with a pob [wooden block] in front of each. The space between the players was covered with mats. The person who presided over the game called "puheoheo" and on the whole assembly answered "puheoheo-heo". The tally keeper of one side, holding a kilu in his hand, addressed the opposing tally keeper in a low voice, saying that the kilu was a kissing kilu (kilu honi) and evidently giving the name of the player. The other tally keeper replied in a low tone and gave the name of the person on his side. The tally keeper then handed the kilu to the two players. Each of the players chanted an oli before casting the kilu. The object was to cast the kilu with a sliding motion across the mat and hit the pob before the other player hit it. If a man hit the pob, his tally keeper recited a chant with a double meaning deemed appropriate, and the successful player crossed over to claim the forfeit. The woman took her turn in playing after the man, so evidently a good deal of reciprocal kissing took place.

The term honi is the Hawaiian form of the general Polynesian term hongu which applies to the Polynesian greeting of pressing noses. In translating honi as kiss, it is not clear whether Emerson meant the foreign form of lip pressure or the old Hawaiian form of nose pressure. According to Emerson, the making of 10 points entitled the player to claim the same forfeit as was made in 'ume but, for the sake of propriety, the forfeit was not paid immediately but at some more convenient time. The personal forfeit, however, could be avoided by payment in land or some other possession if the victor was willing. The play was kept up until morning, and it may be assumed that others beside the two original groups of five were allowed to participate in the game.⁵⁴⁵

Fornander⁵⁴⁶ described the game as being played "from the evening until cock-crow" and when one is beaten he must dance; that is the penalty." Malo⁵⁴⁷ gave a long and detailed description and Mitchell⁵⁴⁸ described it as "similar to quoits, the winner claims a kiss." Bryan⁵⁴⁹ stated it was only by the ali'i [chiefs] even including the king and queens." While both Culin⁵⁵⁰ and Bolton⁵⁵¹ described it as a "lascivious" and "impure" game respectively.

⁵⁴⁵Buck, (Arts and Crafts of Hawaii), op.cit., pp.368-9.

⁵⁴⁶Fornander, op.cit., pp.192-4.

⁵⁴⁷Malo, op.cit., 216-8.

⁵⁴⁸Mitchell, op.cit., p.4.

⁵⁴⁹Bryan, loc.cit.

⁵⁵⁰Culin, op.cit., pp.328-9.

⁵⁵¹Bolton, loc.cit.

OTHER GAMES ALREADY DESCRIBED WHICH HAVE EXULTATION AS A PRIMARY CHARACTERISTIC ARE:

103.	<u>Long Breath Holding.</u>	Refer to game No.30.	Page 59
104.	<u>Sledge Sliding.</u>	Refer to game No.31.	Page 62
105.	<u>Hand Clapping.</u>	Refer to game No.75.	Page 150
106.	<u>Eye Pointing.</u>	Refer to game No. 6.	Page 23
107.	<u>Hand Rubbing.</u>	Refer to game No.33.	Page 74
108.	<u>Cock Fighting.</u>	Refer to game No.12.	Page 27
109.	<u>Mice Shooting.</u>	Refer to game No.42.	Page 90
110.	<u>Pin or Wind Wheel.</u>	Refer to game No.92.	Page 166
111.	<u>Tops.</u>	Refer to game No.34.	Page 75
112.	<u>Kites.</u>	Refer to game No.93.	Page 168
113.	<u>Pit Shooting.</u>	Refer to game No.37.	Page 82
114.	<u>Bandy.</u>	Refer to game No.54.	Page 129
115.	<u>Jumping Jacks.</u>	Refer to game No.91.	Page 166
116.	<u>Fiddlesticks.</u>	Refer to game No.76.	Page 150

CHAPTER III

INTERPRETATION OF THE DATA

A. Introduction

From the data in Chapter II, a classification of games was attempted which endeavoured to give both the predominant aspect of culture and the primary characteristic of each game. The distribution of each game within Polynesia was also given, so that two tables were drawn up; one showed the horizontal and vertical components of each activity, and the other gave the regional distribution of these games.

B. Aspects of Culture Classification

Each aspect of culture was dealt with separately and any obvious relationships were discussed. See Table I for this chart.

1. Political. By definition, these were activities which pertained to the theory, art and practice of government at any level of society. The political activities fell into the following distribution of game characteristics in the cultures studied:

Dexterity	-	16
Strategy	-	6
Pursuit	-	5
Exultation	-	3
Vertigo	-	1
Imitation	-	1
Chance	-	Nil
Enigma	-	Nil

The majority of these games of dexterity involved the elements of training for war or self-preservation. Included in this type of activity was pursuit, as a means of self-defence. The only other form

of activity predominant was that of strategy, which would seem to be complementary with activities dealing in the affairs of government. Thus, the Polynesian societal-political needs seemed to be fulfilled within the games and physical activities which were played.

2. Economic. By definition, these were activities which pertained to production, consumption and exchange within the society. The economic activities fell into the following distribution of game characteristics in the cultures studied:

Dexterity	-	10
Pursuit	-	3
Vertigo	-	3
Exultation	-	3
Chance	-	2
Strategy	-	2
Enigma	-	1
Imitation	-	Nil

The fact that the majority of activities was of a dexterous nature was understandable, as the Polynesians were primarily "hunters and gatherers" and occasionally agriculturalists, which necessitated the use of physical force or activity in the obtaining of food. Thus, games and physical activities were orientated towards this type of existence. It was only natural, then, that activities such as canoe racing, tree climbing, foot racing, etc., were not only a means of amusement, but an aid to economic survival.

3. Family. By definition, these were activities which pertained to the aspects of home and family life within the society. The family activities fell into the following distribution of game characteristics

ASPECTS OF SOCIETY

Table I

CHARACTERISTICS OF GAMES:	POLITICAL (P)	ECONOMIC (E)	FAMILY (F)	CEREMONIAL (C)	SOCIALIZATION(S)	SOCIAL PSYCHOLOGICAL(S.P)
<u>PURSUIT</u> (p)	1,5,8,10,11,	2,4,5,	7,		2,6,7,4,	3,4,8,9,10,11,
<u>CHANCE</u> (c)		13,25,		12,15,	12,	12,13,14,15,
<u>STRATEGY</u> (s)	11,16,17,18, 19,20,	13,25,	22,23,24,	16,		11,13,16,17,18, 19,20,21,22,23, 24,
<u>DEXTERITY</u> (d)	1,5,8,10,16, 17,18,19,20, 30,31,43,44, 45,55,56,	4,5,13,25, 30,32,42,44, 52,53,	7,22,	16,29,31,32, 34,42,	7,9,34,40,	3,4,8,9,10,13, 16,17,18,19,20, 21,22,27,28,29, 30,31,32,33,35, 36,37,38,39,40, 41,43,45,46,47, 48,49,50,51,52, 53,54,55,56,57
<u>ENIGMA</u> (e)		86,	72,		40,72,	35,40,49,50,51, 73,74,75,76,77, 86,
<u>VERTIGO</u> (v)	85,	32,52,86,		29,32,		27,28,29,32,52, 85,86,
<u>IMITATION</u> (i)	90,			93,	90,91	91,92,93,94, 95,96,
<u>EXULTATION</u> (ex)	30,31,43,	30,32,42,		12,31,32,34, 42,93,97,98, 102,	6,9,12,34	9,12,30,31,32, 33,43,57,75,76, 93,94,98,99,100, 101,102,

in the cultures studied:

Strategy	-	3
Dexterity	-	2
Enigma	-	1
Pursuit	-	1
Chance	-	Nil
Imitation	-	Nil
Exultation	-	Nil

An interpretation regarding "family aspect" activities was very difficult in view of the very small number of games and physical activities classified under this heading. This led to the premise that the family as a group had little affect on the types and number of games played. The emphasis in the Polynesian culture appeared to be more on play within peer groups rather than at any family level of integration. Games tended to be played by an all-childrens' group or an all-adult group, and very rarely were they indulged in by mixed age or mixed sex groups. Games of strategy would tend to be produced from child training and obedience-type activities. This fact was borne out by Sutton-Smith¹ in his research into childrens' games.

4. Ceremonial. By definition, these were activities which pertained to a fixed and/or sanctioned pattern of behavior which surrounded various phases of life serving such ends as the religious or aesthetic aspects of society. The ceremonial activities fell into the following distribution of game characteristics in the cultures studied.

¹Brian Sutton-Smith, "A Formal Analysis of Game Meaning", Western Folklore Vol., 18.1959, pp.13-24.

Exultation	-	9
Dexterity	-	6
Chance	-	2
Vertigo	-	2
Imitation	-	1
Strategy	-	1
Pursuit	-	Nil
Enigma	-	Nil

Culturally, the Polynesians enjoyed public festivals and religious ceremonies, consequently it is not difficult to understand why activities of exultation predominated in this classification. Most of these took place after impressive religious and public festivals where much excitement had been generated among the people. The high incidence of dexterity activities was also not surprising during these occasions when the total number of the type of games is considered. The game characteristic which might be expected to have a higher incidence was that of chance, as Roberts, Arth and Bush² stated that all "games of chance are related to religious beliefs." Activities of vertigo such as swinging have had a religious significance³ and were expected to be represented.

5. Socialization. By definition, these were activities which pertained to the institution-process, whereby the accumulated ideas, standards, knowledges and techniques of a culture are transferred to, or imposed upon, the rising generation.

²J.M. Roberts, et.al., "Games in Culture", American Anthropologist Vol.61, August, 1961. p.605.

³E.S. Craighill Handy, "Polynesian Religion", Bishop Museum, Bulletins, No.34. 1927, pp.306-7.

The socialization activities fell into the following distribution of game characteristics in the cultures studied.

Pursuit	-	4
Exultation	-	4
Dexterity	-	3
Enigma	-	2
Imitation	-	2
Chance	-	1
Strategy	-	Nil
Vertigo	-	Nil

An interesting characteristic of this classification is the spread of games over most of the categories. This might be explained in part by the fact that the Polynesians had no formal means of education, and consequently all possible methods were employed in this socialization process. Thus games, because of their ease of acceptance by the children, may have been one of the prime means of passing on traditions of geneologies, methods of fighting, and other economic factors in sustaining and continuing their culture. Virtually all aspects of Polynesian culture were passed on in one form or another in games and physical activities. For these people, life was one long game, but obviously some games were more laborious and dangerous than others.

6. Social Psychological. By definition, these were activities which pertained to the reciprocal relations of interacting human beings either between individuals or between groups. The social psychological activities fell into the following distribution of game characteristics in the cultures studied:

Dexterity	-	41
Exultation	-	17
Strategy	-	11
Enigma	-	11
Vertigo	-	7
Pursuit	-	6
Imitation	-	6
Chance	-	4

The great incidence of activities in this category was expected as the Polynesians were a people who loved to take part in group activities which tended to attract large crowds. Because of their primitive technology, complicated equipment and facilities were not at their disposal. Thus, games of dexterity with simple equipment (often only the hands and feet) were predominant, and also because of the large spectatorship aspect, games of exultation were an obvious predominant characteristic. It was not surprising, because of their close communal life, that all game characteristics would be represented in these reciprocal human relations. As stated previously, all, or nearly all, of their games, required the presence of a group before the activity could or would be conducted.

C. Characteristics of Games Classification

Each characteristic of games was dealt with separately and any obvious relationships were discussed. (See Table I).

1. Pursuit. By definition, these were activities involving the elements of chase with a view to reaching, accomplishing or obtaining. The pursuit activities fell into the following aspects of culture:

Social Psychological	-	6
Political	-	5
Socialization	-	4
Economic	-	3
Family	-	1
Ceremonial	-	Nil

The aspect which might be expected to have predominated was political, as most of the pursuit activities were events dealing with self-protection or warfare training. Socialization would also be expected to have a high incidence, because it was through games that many of their customs were enculturated, (and such was the case).

2. Chance. By definition, these were activities involving the mode of occurrence of phenomena uncontrolled by human capacity or purpose. The chance activities fell into the following aspects of culture:

Social Psychological	-	4
Economic	-	2
Ceremonial	-	2
Socialization	-	1
Political	-	Nil
Family	-	Nil

The incidence of chance activities in the social psychological aspect of culture was expected because of the strong reciprocal relations existing between these people. It was thought that the ceremonial aspect would influence games of chance⁴, however this did not appear to be the case. Games of chance appeared to have the lowest incidence of any type of game.

⁴Roberts Arth and Bush, loc.cit.

3. Strategy. By definition, these were activities involving the art of devising and employing plans towards a goal. The strategy activities fell into the following aspects of culture:

Social Psychological	-	11
Political	-	6
Family	-	3
Economic	-	2
Ceremonial	-	1
Socialization	-	Nil

Activities of strategy, then played a major role in the social psychological and political aspects of Polynesian life, in their games with other people and their survival training activities.

4. Dexterity. By definition these were activities involving the elements of physical skill. The dexterity activities fell into the following aspects of culture:

Social Psychological	-	41
Political	-	16
Economic	-	10
Ceremonial	-	6
Socialization	-	3
Family	-	2

Because of the Polynesians' simple technology and great dependence on reciprocal relationships it was expected that the greatest number of games and physical activities would fall into this category of social psychological and dexterity, and that dexterity-type activities would furnish the large majority of all the types of games that were played. This was the case, with 78 such primary characteristics being so classified.

5. Enigma. By definition, these were activities involving elements of mental skill outside the realm of strategy. The enigma activities fell into the following aspects of culture:

Social Psychological	-	11
Socialization	-	2
Family	-	1
Economic	-	1
Political	-	Nil
Ceremonial	-	Nil

Because the Polynesians lacked many of our complicated, manufactured games, all of the enigma activities were simple in form despite the fact that they had to be performed by a group rather than by the individual or family group. Hence, social psychological activities, because of their reciprocal relations, were expected to predominate. (and such was the case).

6. Vertigo. By definition, these were activities involving loss of body stability and/or equilibrium. The vertigo activities fell into the following aspects of culture:

Social Psychological	-	7
Economic	-	3
Ceremonial	-	2
Political	-	1
Family	-	Nil
Socialization	-	Nil

The incidence of activities in the economic aspect was surprising, and the only explanation would seem to be in the fact that tree climbing and diving in the sea were not only enjoyable activities,

but, in addition, they provided the Polynesians with the means for increasing their attainment of food.

7. Imitation. By definition, these were activities involving the elements of mimicry. These imitation activities fell into the following aspects of culture:

Social Psychological	-	6
Socialization	-	2
Political	-	1
Ceremonial	-	1
Family	-	Nil
Economic	-	Nil

Imitation, the method by which children, and adults learned a greater part of their traditions, etc., was expected to be part of all reciprocal human relations, but it was felt that the family, because of the ease and amount of contact with the children, would have played a part in these activities. However, none of the imitation activities were so classified.

8. Exultation. By definition, these were activities involving jubilation and/or excitement. These exultation activities fell into the following aspects of culture:

Social Psychological	-	17
Ceremonial	-	9
Socialization	-	4
Political	-	3
Economic	-	3
Family	-	Nil

The incidence of exultation activities in the social psychological and ceremonial aspects was understandable in light of the emphasis placed on group activity. The lack of activities in this category in the family aspect was also not surprising as the family's main duty was to provide a firm base for reciprocal relations while other institutions (e.g., religion, etc.) were to provide the exultation in their culture.

D. Distribution of Games.

For obvious reasons, few relationships can be inferred from Table , showing the distribution of games throughout Polynesia. Beacuse of their ingenuity, it was probable that most, if not all, of the different island groups played similar games or variations of them. Their origin must be remembered, in that these people were, at one stage, of common ancestry, with common traditions, customs and habits. Thus it was to be expected that their games should show remarkable consistency in their distribution. This did not appear to be the case in all of their games, but this may be credited to poor documentation of their games or to insufficient collection of available data.

From Table II , the distribution of games within the island groups of Polynesia as as follows:

Hawaii	-	71
New Zealand	-	36
Samoa	-	32
Fiji	-	31
Tahiti	-	29
Tonga	-	11
Niue	-	10
Rotuma	-	10
Society Islands	-	10
Marquesas Islands	-	7

This distribution of games revealed little in the way of useful information except for two points:

(1) The larger, more populated and earlier colonized island groups such as Hawaii, New Zealand, Samoa, Fiji, and Tahiti, were always better documented. It was to these larger islands that missionaries and early colonial officials were sent, and in most cases such individuals were responsible for a large proportion of the data which was available for this study. Hence, these larger groups showed a superior number of recorded activities and games over the smaller, less populated and colonized island groups.

(2) Certain types of games were reported in greater detail than other types of activities. The following is a list of criteria which would appear to be necessary in the composition of an activity to ensure the documentation of that particular game by the early authors:

GAME DISTRIBUTION

Table 2

GAME	HAWAII	TAHITI	NEW ZEALAND	FIJI	SAMOA	NIUE	ROTUMA	TONGA	SOCIETY	MARQUESAS
1. FOOT RACING	X	X	X	X	X	X				
2. BURDEN RACING	X									
3. WHEELBARROW RACING	X									
4. SWIMMING RACES	X	X	X	X	X					
5. CANOE RACES	X	X	X	X	X	X	X			
6. EYE POINTING	X									
7. HOP-SCOTCH	X			X						
8. TAG	X			X	X					
9. BLIND-MAN'S BLUFF	X	X		X	X			X		
10. PRISONER'S BASE	X			X	X		X	X		
11. HIDE-AND-SEEK	X		X	X	X	X				
12. COCK-FIGHTING	X	X			X		X		X	
13. HAND BETTING	X		X							
14. DRAWING STRAWS	X									
15. PIG-GUESSING	X									
16. BOXING	X	X	X		X			X	X	
17. FENCING	X	X			X					
18. WRESTLING	X	X	X	X	X	X	X		X	
19. TUG-OF-WAR	X			X	X	X				
20. FINGER PULLING	X		X							
21. COCOANUT SHELL CASTING	X									
22. BALL GAMES	X	X		X			X			X
23. CHECKERS	X	X	X		X				X	
24. DRAUGHTS	X		X							
27. ROPE JUMP	X			X						
28. HEAD STANDING AND VAULTING	X		X							
29. SEE-SAW	X		X							
31. SLEDDING	X		X							
32. STILTS	X	X	X						X	X
33. HAND RUBBING	X									
34. TOPS	X	X	X		X	X			X	X

GAME DISTRIBUTION (Continued)

Table 2

GAME	HAWAII	TAHITI	NEW ZEALAND	FIJI	SAMOA	NIUE	ROTUMA	TONGA	SOCIETY	MARQUESAS
35. CUP AND BALL GAMES	X									X
36. THROWING A POINTED OBJECT	X									
37. PIT SHOOTING	X									
38. MARBLES	X			X						
39. JUGGLING	X	X		X	X					
40. JACKSTONES	X	X	X	X	X					
41. STICK CASTING	X				X					
42. BOW AND ARROW	X	X		X	X		X	X	X	X
43. SPEAR DODGING	X	X	X	X	X			X		
44. ARROW OR SPEAR THROWING	X	X	X	X	X		X	X		
45. DART GAMES	X	X	X	X	X	X	X	X	X	X
46. BOWLING DISCS	X	X		X	X					
47. PITCHING DISCS	X	X		X	X			X		
48. RING CASTING	X									
49. HIDE THE STONE	X									
50. FINDING THE STONE	X									
51. STONE HIDING	X		X							
52. LEAPING INTO THE SEA	X	X	X	X	X	X				
53. ATHLETIC EVENTS	X		X	X	X					
54. BANDY		X								
55. HOOPS			X							
56. CATAPULT AND SLINGS		X	X							X
57. CHILDREN'S GAMES	X		X	X	X			X		
72. CAT'S CRADLE	X	X	X	X	X			X		
73. STRING TRICKS	X		X							
74. STONE DICE	X									
75. HAND CLAPPING	X									
76. FIDDLESTICKS				X						
77. RIDDLES ETC.	X		X	X	X					
85. SWINGS	X	X	X	X						
86. SURF BOARD RIDING	X	X	X		X	X		X		
90. SHAM FIGHTS	X	X	X	X	X	X		X	X	
91. JUMPING JACKS			X							
92. HORSE RIDING	X									
93. KITES	X	X	X				X		X	
94. WIND OR PIN WHEEL	X				X		X			
95. DOLLS	X									
96. LEAF CANOES	X	X	X	X						
97. FIREBRAND CLIDING	X									
98. BULL ROARER	X		X							
99. DRAGON FLY CATCHING	X									
100. POP OPEN THE EYES	X	X								
101. ADULT ATTRACTION GAME 'UME'	X									
102. KILU ARISTOCRATIC 'UME'	X									
TOTAL	71	29	36	31	32	10	10	11	10	7

- a. A large group of people, players or spectators gathered at the site of the activity;
- b. brutality displayed by the combatants in the course of the contest;
- c. contests and spectacular events which were unusual to the European authors, such as sledding or dart throwing;
- d. the type of occasion, such as a religious festival or public holiday, rather than an ordinary gathering at which the event was performed;
- e. wagering or betting which were unique to Hawaii and as a consequence activities of this type were viewed with considerable interest by early visitors; and,
- f. familiarity of games to visitors.

Activities which were widely recorded included most, if not all, of the above qualities. The following is a list of these activities which were reported in many island groups.

Foot Racing.

Canoe Races.

Wrestling.

Boxing.

Bow and Arrow.

Dart Game.

Leaping into the Sea.

Cat's Cradle.

Surf-board Riding.

Sham Fights.

Arrow or Spear Throwing.

From this group of games, all of which appeared in six or more island groups, the only one which does not have most of the required qualities is cat's cradle, and this as a game had received world-wide anthropological recognition, and as thus would be readily reported.

CHAPTER IV

SUMMARY AND CONCLUSIONS

The primary purpose of this study was concerned with the collection and tabulation of the ancient Polynesian games and physical activities. Of secondary importance was the study of any apparent relationships which became obvious between these games and the various aspects of culture.

Data was collected concerning games and physical activities, which was pre-European in nature, from ten island groups within Polynesia, namely: Hawaii, Tahiti, New Zealand, Fiji, Samoa, Niue, Rotuma, Tonga, Society, and Marquesas. Seventy-six games and physical activities, with their variations, were compiled as a result of the research conducted. A classification system was devised which enabled the researcher to cross-classify these games into horizontal and vertical components. The horizontal component of the cross-classification table consisted of six aspects of a primitive culture, namely: political, economic, family, ceremonial, socialization, and social psychological. For the purpose of this study the vertical-component of the table depicted eight primary game classifications, namely: pursuit, chance, strategy, dexterity, enigma, vertigo, imitation, and exultation.

From the cross-classification table of games and aspects of culture the incidence of cultural aspects of games of the Polynesians was:

Social Psychological	-	93
Political	-	32
Economic	-	24
Ceremonial	-	21
Socialization	-	16
Family	-	7

It may be concluded, then, that the social psychological aspect of society was the element of Polynesian culture which had the greatest influence on the games and physical activities that were played. The close communal and co-operative type of existence of the people, then, in which interaction between individuals and groups was a constant process, was obviously carried over into their games and physical activities. The relatively high number of political games demonstrated that many of their activities were orientated towards self-preservation, and governmental control was aided within the framework of some of their games. The relatively few family-type games also reflected the position of the family, in that it was not the duty of the family to provide games activities but merely to act as the foundation for reciprocal relationships. Most play, then, was done in peer groups rather than mixed age or sex groups.

Also from an analysis of the cross-classification table, the number of game characteristics in the games of the Polynesians was:

Dexterity	-	78
Exultation	-	36
Strategy	-	23
Pursuit	-	19
Enigma	-	15
Vertigo	-	13
Imitation	-	10
Chance	-	9

This high incidence of dexterity or physical skill activities seemed to complement the Polynesian society. Their simple technology required the use of extensive physical power and skill in manipulating the environment in order to exist as a culture. Thus it could be concluded that many games of dexterity were needed by the culture for the training for survival of the Polynesians.

Exultation, also, played an important role in the life of a people who were orientated toward reciprocal relationships. When the people congregated in groups it was reasonable to expect that much excitement would be generated. The incidence of chance was comparatively low and the main activities in this group tended to come from Hawaii, where betting was a fairly common occurrence, and thus games of chance, though only in this culture, were at a higher level of participation.

With respect to the distribution of games, it was obvious that island groups which were larger, more populated, earlier colonized and more frequently visited and exploited by early trading ships, had a better chance of having their games and physical activities described and recorded.

This was shown to be the case, as out of the seventy-six games and their variations recorded, the incidence in the island groups was as follows:

Hawaii	-	71
New Zealand	-	36
Samoa	-	32
Fiji	-	31
Tahiti	-	29
Tonga	-	11
Niue	-	10
Rotuma	-	10
Society	-	10
Marquesas	-	7

Recommendations

It would appear that the data obtained is of value to the total body of knowledge within Physical Education. If the discipline of Physical Education had a complete knowledge of the games of mankind, the study of the evolution of play would be simplified, and the subject matter could be presented in an interesting and meaningful manner. At the present time there are too many unknown or vague areas which are passed over or even considered unimportant in the history of games.

There is a whole new era awaiting physical educationists who are prepared to delve into the evidence about these and other primitive peoples. Other cultures worthy of similar study would be Micronesia and Melanesia, so that at least a total picture of the peoples of the Pacific Ocean could be obtained. A further study, linking these three cultures, might show a possible diffusion of games and physical activities across this ocean.

Many theories have been put forward as to the migration of these Pacific Ocean peoples. Perhaps physical educators could assist such theorists by closer examination of the cultures by an analysis of games.

Another type of research which might prove profitable to physical education and society would be the study of the influence of the white-man upon the games and physical activities of these peoples. It might be possible to show the trends of play and the influence of the white man upon different peoples, and the influence of different nations (i.e., French, English, American, German, etc.) upon these peoples.

The one aspect of games and physical activities which was not dealt with in this study was dancing and yet detailed research of this activity could be beneficial to physical education. (Notable among world famous dances of the geographical area studied are the New Zealand posture or haka and poi dances, and the Hawaiian hula.)

The system of classification used in this study was designed with primary consideration being given to primitive people such as the Polynesians and Australian Aborigines. It is to be hoped that the same or a similar classification can be used in future studies which are conducted along these lines. In this way many primitive cultures could be examined and relationships developed between and within them.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Aitken, R. T. "Ethnology of Tubuai," Bishop Museum, Bulletins, Vol. 70, 1930.
- Alexander, W. D. A Brief History of the Hawaiian People. Hawaiian Islands: Board of Education, 1891.
- American Corporation of Canada Ltd. Encyclopedia Americana, Vol. 22; Toronto: American Corporation of Canada Ltd., 1963.
- Armstrong, Alan. Maori Games and Hakas. Wellington: A. H. and A. W. Reed, 1964.
- Armstrong, Alan. and Ngata, Reupena. Maori Action Songs. Wellington: A. H. and A. W. Reed, 1960.
- Audran, H. "Some Paumotu Chants," Polynesian Society, Journal, Vol. 12, 1903.
- _____. "Other Folklore Materials," Polynesian Society, Journal, Vol. 19, 1910.
- _____. "Other Folklore Materials," Polynesian Society, Journal, Vol. 20, 1911.
- Ballou, M. M. "In Old Samoa," Mid-Pacific Magazine. July, 1920.
- Barzun, J. and Groff, H. F. The Modern Researcher. New York: Harcourt, Brace, and World Incorporated, 1957.
- Beaglehole, E. "Polynesian Anthropology To-day," American Anthropologist, Vol. 39, 1937.
- _____. "Ethnology of Pukapuka," Bishop Museum, Bulletins, Vol. 150, 1938.
- Beaglehole, E. and P. "Pangi, A Village in Tonga," Polynesian Society, Memoirs, Vol. 18, Wellington, 1941.
- Becke, Louis. Wild Life in Southern Seas. London: T. Fisher Unwin, 1890.
- Best, Elsdon. "Some Aspects of Maori Myth and Religion," Dominion Museum Monograph, No. 1. Wellington, New Zealand, 1922.

Best, Elsdon. "Games and Pastimes of the Maori," Dominion Museum, Bulletin, Vol. 8, 1925.

_____. "Forest Lore of the Maori," Dominion Museum, Bulletin, No. 14, Wellington, New Zealand, 1942.

_____. The Maori As He Was. Wellington: Government Printer, 1952.

_____. Polynesian Voyagers. The Maori As A Deep Sea Navigator, Explorer and Colonizer. Wellington: Government Printer, 1954.

Bingham, H. "The Gilbert Islanders," Pacific Commercial Advertiser, Supplement. April, 1880.

Blake, Tom. Hawaiian Surfboard. Honolulu: Paradise of the Pacific Press, 1935.

Boas, Franz. Primitive Art. New York: Dover Publications, Inc., 1927.

Bolton, H. C. "Some Hawaiian Pastimes," Journal of American Folklore, Vol. 4, No. 12, 1890.

Brigham, W. T. Preliminary Catalogue of the B.P. Bishop Museum. Honolulu, Hawaii: B.P. Bishop Museum Press, 1892.

_____. "Marquesan and Tahitian Homes," Mid-Pacific Magazine, October, 1916.

Britt, Steward H. and James, S. O. "Toward a Social Psychology of Human Play," Journal of Social Psychology, Vol. 3, 1961.

Brown, Ina C. Understanding Other Cultures. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963.

Bryan E. H. (Jr.). Ancient Hawaiian Life. Honolulu: Books About Hawaii Press, 1950.

Buck, Sir Peter H. "Some Notes on the Small Outrigger Canoe of Niue Fekai," Dominion Museum, Bulletin, Vol. 3, Wellington, 1911.

_____. "Samoan Material Culture," Bishop Museum, Bulletins, Vol. 75, 1930.

_____. "Ethnology of Tongareva," Bishop Museum, Bulletins, Vol. 92, 1932.

_____. "Ethnology of Manihiki-Rakalanga," Bishop Museum, Bulletins, Vol. 99, 1932.

- Buck, Sir Peter H. "Mangaian Society," Bishop Museum, Bulletins, Vol. 122, 1934.
- _____. Vikings of the Pacific. Chicago: The University of Chicago Press, 1938.
- _____. "Ethnology of Mangareva," Bishop Museum, Bulletins, Vol. 157, 1938.
- _____. "Pan-Pipes in Polynesia," Polynesian Society, Journal, Vol. 50, 1941.
- _____. "The Feather Cloak of Tahiti," Polynesian Society, Journal, Vol. 52, 1943.
- _____. "Arts and Crafts of the Cook Islands," Bishop Museum, Bulletins, Vol. 179, 1944.
- _____. "An Introduction to Polynesian Anthropology," Bishop Museum, Bulletins, Vol. 187, 1945.
- _____. "Arts and Crafts of Hawaii," Bishop Museum, Special Publication, Vol. 45, 1957.
- _____. The Coming of the Maori. Wellington: Whitcombe and Tombs Ltd., 1962.
- Burrows, E. G. "Ethnology of Futuna," Bishop Museum, Bulletins, Vol. 138, 1936.
- _____. "Ethnology of Uvea (Wallis Island)," Bishop Museum, Bulletins, Vol. 145, 1937.
- Caillois, Roger. "The Structure and Classification of Games," Diogenes, No. 12, 1955.
- _____. "Unity of Play: Diversity of Games," Diogenes, No. 19, 1957.
- _____. Man and the Sacred. Glencoe, Illinois: The Free Press, 1959.
- _____. Man, Play and Games. Glencoe, Illinois: The Free Press, 1961.
- Church, J. W. "A Vanishing People of the South Seas," National Geographic Magazine, 1919.
- Churchill, Llewella P. "Sports of the Samoans," Outing, March, 1899.
- Churchill, W. "Niue: A Reconnaissance," American Geographic Society, Bulletin, 1908.

- Churchill, W. "The Polynesian Wanderings," Carnegie Institute of Washington, Publication 255, 1917.
- Collocott, E. E. V. "Tonga, Yesterday and Today," Mankind, Vol. 2, 1938.
- Coombe, Florence. Islands of Enchantment. St. Martins Street, London: Macmillan and Co. Ltd., 1911.
- Corney, Peter. Early Northern Pacific Voyages. Honolulu: Thomas G. Thrum Publisher, 1896.
- Cowan, J. The Maori. Yesterday and Today. Auckland: Whitcombe and Tombs Ltd., 1930.
- _____. The Caltex Book of Maori Lore. Wellington: A. H. and A. W. Reed, 1962.
- Culin, Stewart. "Hawaiian Games," American Anthropologist, Vol. 1, 1899.
- Davidson, D. S. "The Pacific and Circum-Pacific Appearances of the Dart-Game," Polynesian Society, Journal, Vol. 45 and Vol. 46, 1936-37.
- Del Mar, F. A Year Among The Maoris. A Study of Their Arts and Customs. London: Ernest Benn Ltd., 1924.
- Dickey, L. A. "String Figures from Gilbert Islands," Bishop Museum, Bulletins, Vol. 54, 1928.
- Dieffenbach, Ernest. Travels in New Zealand. London: John Murray Albemarle Street, Vol. I and Vol. II, 1843.
- Doubleday, Nelson. and Cooley Earl C. Encyclopedia of World Travel. Garden City, New York: Doubleday and Co. Ltd., 1961.
- Drews, R. A. "Gilbert Island Canoe," Idem, Vol. 47, 1945.
- Drummond, S. "Canoes and Canoe-Travelling in Samoa," Juvenile Missionary Magazine, 1873.
- Dunlap, Henen L. "Games, Sports, Dancing and Other Vigorous Recreational Activities and Their Function in Samoan Culture," Research Quarterly, Vol. 22, 1951.
- Dyson, M. "Samoa and the Samoans," Victorian Review, Vol. 6, 1882.

- Ellis, William. Polynesian Researches. Newgate Street, London: Fisher, Son and Jackson, 1830.
- Emory, Kenneth P. Ancient Hawaiian Civilization. Honolulu: The Kamehamela School Press, 1933.
- _____. "Manihiki Inlaid Bowls," Ethnologia Cranmorensis, Vol. 4, 1939.
- Fairchild, Henry P. (ed) Dictionary of Sociology and Related Sciences. Totowa, New Jersey: Littlefield, Adams and Co., 1965.
- Firth, Raymond. Primitive Economics of the New Zealand Maori. New York: E. P. Dutton and Co., 1929.
- _____. "A Dart Match in Tikopia," Oceania, Vol. 1, 1930.
- _____. Human Types. New York: Mentor Books, 1958.
- Fornander, Abraham. "Hawaiian Antiquities and Folklore," Bishop Museum, Memoirs, Vol. 6, Part 1, 1919.
- Foskett, John M. "Social Structure and Social Participation," American Sociological Review, Vol. 20, 1955.
- Fraser, J. "Folk Songs and Myths from Samoa," Polynesian Society, Journal, Vol. 5, 1896, Vol. 6, 1897, and Vol. 9, 1900.
- Gardiner, Stanley J. "The Natives of Rotuma," Royal Anthropological Institute, Journal, Vo. 27, 1898.
- Geddes, W. R. "Deuba, A Study of a Fijian Village," Polynesian Society, Memoirs, Vol. 22, 1946.
- Gifford, E. W. "Tongan Society," Bishop Museum, Bulletin, Vol. 61, 1929.
- Gregg, G. W. "A Study of Certain Factors Influencing Participation in Sport," (M.A. Thesis, University of California - Berkeley), 1950.
- Gregory, H. E. Geography of the Pacific, in Problems of the Pacific. Honolulu: 2nd Conference I.P.R., 1927.
- Grimble, A. F. "Canoes in the Gilbert Islands," Royal Anthropological Institute, Journal, Vol. 54, 1924.
- Groos, Karl. The Play of Man. New York: D. Appleton - Century Co., 1901.
- _____. The Play of Animals. New York: D. Appleton & Co., 1901.

- Gross, Edward. "A Functional Approach to Leisure Analysis," Chapter 2, in Erwin O. Smigel (ed.), Work and Leisure. New Haven: College and University Press, 1963.
- Haddon, Alfred C. The Study of Man. New York: G.P. Putman's Sons, 1898.
- Haddon, Kathleen. Artists in String. London: Methuen, 1930.
- Hadfield, E. Among the Natives of the Loyalty Group. St. Martins Street, London: Macmillan and Co. Ltd., 1920.
- Handy, E. S. C. "The Native Culture in the Marquesas," Bishop Museum, Bulletins, Vol. 9, 1923.
- Handy, E. S. C. and W. C. "Samoan Housebuilding, Cooking and Tattooing," Bishop Museum, Bulletins, Vol. 15, 1924.
- Handy, W. C. "String Figures from the Marquesas and Society Islands," Bishop Museum, Bulletins, Vol. 18, 1925.
- _____. "Handicrafts of the Society Islands," Bishop Museum, Bulletins, Vol. 42, 1927.
- Handy, E. S. C. "Polynesian Religion," Bishop Museum, Bulletins, Vol. 34, 1927.
- _____. "History and Culture in the Society Islands," Bishop Museum, Bulletins, Vol. 79, 1931.
- Handy, E. S. C. et.al. Ancient Hawaiian Civilization. Rutland, Vermont and Tokyo, Japan: Charles R. Tuttle Co., 1965.
- Harper, N. D. Our Pacific Neighbours. Melbourne: F.W. Eleshire, 1960.
- Helanko, R. "Sports and Socialization," Acta Sociologica, Vol. 2, 1957.
- Henry, F. M. "Physical Education - An Academic Discipline," Journal of Health, Physical Education and Recreation. No. 7, Vol. 35, September, 1964.
- Hocart, A. M. "Two Fijian Games," Man, Vol. 9, 1909.
- _____. "Fijian Customs of Tavua," Royal Anthropological Institute, Journal, Vol. 43, 1913.
- _____. "Early Fijians," Royal Anthropological Institute, Journal, Vol. 49, 1919.

- Hocart, A. M. Lau Islands Fiji. Honolulu, Hawaii: Bernice P. Bishop Museum, Bulletin, No. 62, 1929.
- Hogbin, H. I. "Polynesian Ceremonial Gift Exchanges," Oceania, Vol. 3, 1932-33.
- Hornell, J. "String Figures from Fiji and Western Polynesia," Bishop Museum, Bulletins, Vol. 39, 1927.
- _____. "Outrigger Canoes of the Tongan Archipelago," Polynesian Society, Journal, Vol. 39, 1930.
- Huizinga, Johan. Homo Ludens. Boston: Beacon Press, 1960.
- Huxley, Julian. Evolution in Action. New York: Signet Science Library Books, 1953.
- Jayne, Caroline F. String Figures and How to Make Them. New York: Dover Publications, Inc., 1906.
- Jenness, D. and Ballantyne, A. Rev. The Northern D'Entreaux. Oxford: The Clarendon Press, 1920.
- Jokl, Ernst, et.al. Sports in the Cultural Pattern of the World. Helsinki: Institute of Occupational Health, 1956.
- _____. Medical Sociology and Cultural Anthropology of Sport and Physical Education. Springfield, Illinois: Charles C. Thomas Publisher, 1964.
- Keesing, Felix M. "The Changing Maori," Memoirs of the Board of Maori Ethnological Research, Vol. 4, New Plymouth, New Zealand, 1928.
- _____. Education in Pacific Countries. Shanghai: Kelley & Walsh Ltd., 1937.
- _____. The South Seas in the Modern World. London and Stanford: Macmillan and Co. Ltd., 1941.
- _____. Social Anthropology in Polynesia. New York: Oxford University Press, 1953.
- Kenn, Charles. "Ancient Hawaiian Sports and Pastimes," Mid-Pacific Magazine, Vol. 48, 1935.
- Kennedy, K. "Tongan Dance," Mankind, July, 1931.
- Kenyon, G. S. and Loy, J. W. "Toward a Sociology of Sport," Journal of Health, Physical Education, and Recreation, May, 1965.

- Keri, H. "Ancient Games and Popular Games: A Psychological Essay," American Image, Vol. 15, 1958.
- King, Captain A. A Voyage of the Pacific Ocean. London: 2nd Edition, Vol. III, 1784.
- King, Samuel W. "Ancient Hawaiian Sports and Amusements," Hawaii Educational Review. Honolulu, September, 1924.
- Kirket-Smith, Kaj. Primitive Man and his Ways. New York: Odhams Press Ltd., 1960.
- La Farge, J. "A Fijian Festival," Century Magazine, 1904.
- Lehman, Harvey C. and Witty, Paul. The Psychology of Play Activities. New York: A. S. Barnes & Co., 1927.
- Lewis, Albert B. People of the South Pacific. Chicago: Chicago Natural History Museum, 1951.
- Linton, Ralph. "The Material Culture of the Marquesas Islands," Bishop Museum, Memoirs, Vol. 8, No. 5, 1923.
- _____. "Ethnology of Polynesia and Micronesia," Chicago (Field) Museum of Natural History, Guide Series, 6, 1926.
- Lissner, Ivar. The Living Past. Middlesex, England: Penguin Books Ltd., 1957.
- Loeb, E. M. "History and Traditions of Niue," Bishop Museum, Bulletins, Vol. 32, 1926.
- Luke, H. "Tonga: The Last Kingdom of the South Seas," Scottish Geographical Magazine, Vol. 59, 1943.
- Luomala, Katharine. "Maui-of-a-thousand-tricks," Bishop Museum, Bulletins, Vol. 198, 1949.
- Maccoby, M. "The Game Attitude," (Ph.D. dissertation, Laboratory of Social Relations, Harvard University), 1960.
- MacGregor, G. "Ethnological Survey of Rotuma and Tokelau Islands," Bishop Museum, Bulletins, Vol. 106, 1932.
- _____. "Ethnology of Tokelau Islands," Bishop Museum, Bulletins, Vol. 146, 1937.
- McIntosh, Peter C. Sport in Society. London: C. A. Watts & Co. Ltd., 1963.

- Malo, David. "Hawaiian Antiquities," Bishop Museum, Special Publications, No. 2, 1951.
- Mead, Margaret. "The Pua Game of Atui," Polynesian Society, Journal, Vol. 11, 1902.
- _____. "The Role of the Individual in Samoan Culture," Royal Anthropological Institute, Journal. 58:481-96, 1928.
- _____. Coming of Age in Samoa. New York: Mentor Books, 1928.
- _____. An Inquiry into the Question of Cultural Stability in Polynesia. New York: Columbia University Press, 1928.
- _____. "Social Organization of Manua," Bishop Museum, Bulletins, Vol. 76, 1930.
- _____. Growing Up in New Guinea. New York: Apollo Editions, 1930.
- _____. Sex and Temperament in Three Primitive Societies. New York: Mentor Books, 1935.
- _____. Cooperation and Competition Among Primitive Peoples. New York: McGraw-Hill, 1937.
- _____. (ed) Cultural Patterns and Technical Change. New York: Mentor Books, 1955.
- _____. New Lives for Old. New York: Mentor Books, 1956.
- _____. "The Pattern of Leisure in Contemporary American Culture," The Annals of the American Academy of Political and Social Science, Vol. 313, Sept. 1957.
- Mitchell, Donald D. "Hawaiian Games and Pastimes," unpublished works Unit 13, Honolulu, 1967.
- Natan, Alex. Sport and Society. London: Bowes and Bowes, 1958.
- Neumann, John Von. and Morgenstern, Oskar. The Theory of Games and Economic Behavior. Princeton: Princeton University Press, 1944.
- Nevins, Allan. The Gateway to History. New York: Anchor, Doubleday & Co. Inc., 1962.
- Oakley, Kenneth P. Man the Tool-Maker. London: British Museum (Natural History) Press, 1963.

- Oldman, W. O. "Oldman Collection of Polynesian Artifacts," Polynesian Society, Memoirs, Vol. 15, 1938-40.
- Oliver, Douglas L. Solomon Island Society. Cambridge: Harvard University Press, 1955.
- _____. The Pacific Islands. Garden City, New York: Doubleday and Co. Inc., 1961.
- Pickford, R. W. "Aspects of the Psychology of Games and Sports," British Journal of Psychology, Vol. 31, April, 1941.
- Pollock, Harold J. "The Polynesian Game of Pua," Chambers' Journal. London, September, 1948.
- Pukui, Mary K. "Games of My Hawaiian Childhood," California Folklore Quarterly, Vol II, No. 3, July, 1943.
- Quain, B. Fijian Village. Chicago: The University of Chicago Press, 1948.
- Redfield, Robert. The Primitive World and Its Transformations. Ithaca, New York: Great Seal Books, 1953.
- Rivers, W. H. R. and Haddon, A. C. "A Method of Recording String Figures," Mankind, Vol. 2, 1902.
- Roberts, John. et. al. "Games in Culture," American Anthropologist, Vol. 61, August, 1959.
- Roberts, John. and Sutton-Smith, Brian. "Child Training and Game Involvement," Ethnology, Vol. 1, 1962.
- Roberts, John. et.al. "Strategy in Games and Folk Tales," Journal of Social Psychology, Vol. 61, 1963.
- Roth, H. L. "Tatu in the Society Islands," Royal Anthropological Institute, Journal, Vol. 35, 1905.
- Russell, Alexander. Aristocrats of the South Seas. London: Robert Hale Ltd., 1961.
- Safford, W. E. "Old and New Samoa," American Anthropologist, Vol. 23, 1921.
- Sahlins, Marshall D. Social Stratification in Polynesia. Seattle: University of Washington Press, 1958.

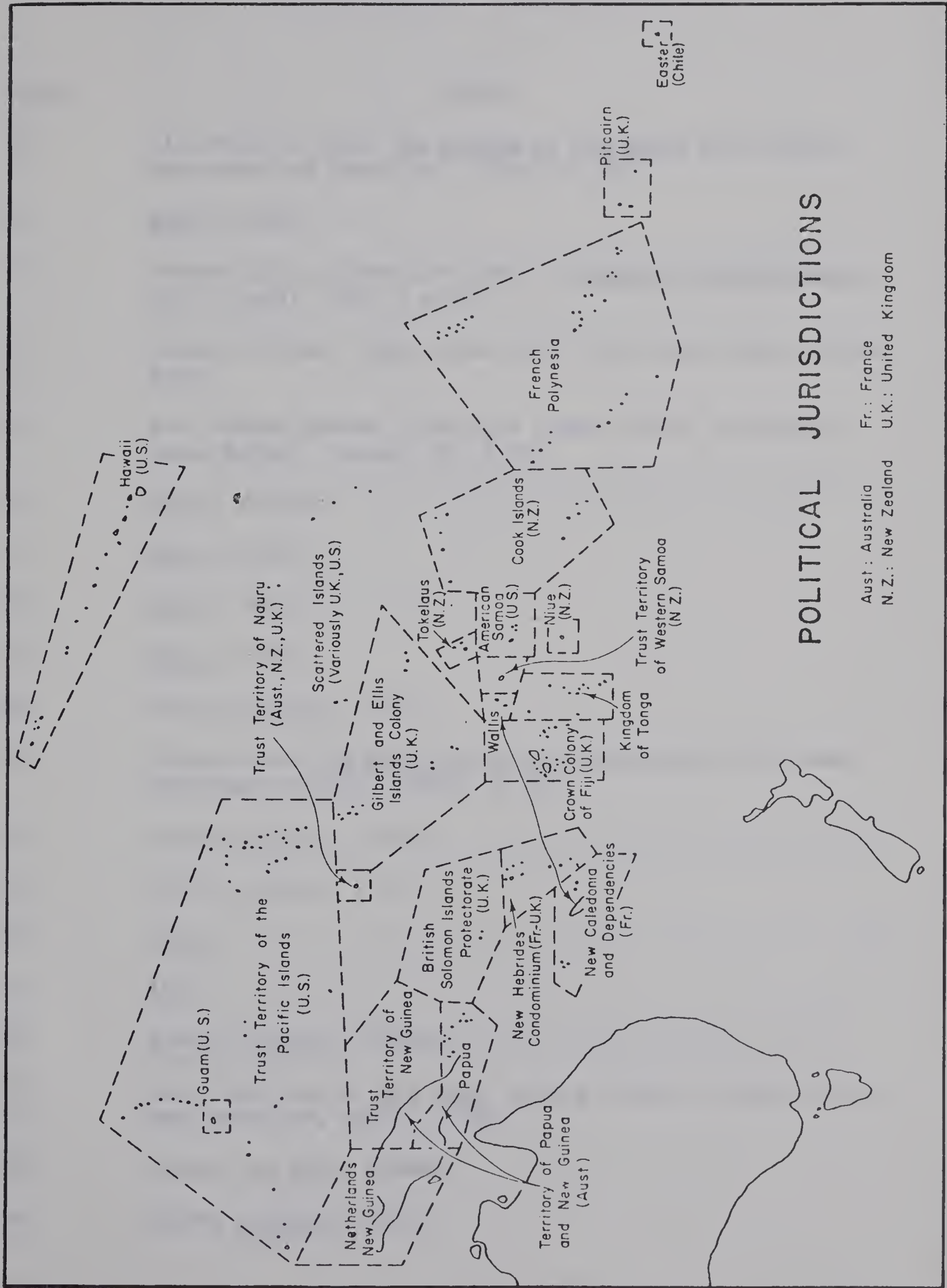
- Sapora, Allen V. and Mitchell, Elmer D. The Theory of Play and Recreation. New York: The Ronald Press, 1961.
- Schlosberg, Harold. "The Concept of Play," Psychological Review, Vol. 54, 1947.
- Schorsch, Robert Steven. Psychology of Play. South Bend, Indiana: Notre Dame Press, 1942.
- Setchell, W. A. "American Samoa: Part II. Ethnology of the Samoans," Carnegie Institution, Department of Marine Biology, Publication 341, 1924.
- Skinner, H. D. "Bowling Discs from New Zealand and Other Parts of Polynesia," Polynesian Society, Journal, Vol. 55, 1946.
- Smith, S. D. "Futuna, or Horne Island and Its People," Polynesian Society, Journal, Vol. 1, 1892.
- _____. "The First Inhabitants of the Ellice Group," Polynesian Society, Journal, Vol. 5, 1896.
- _____. "Niue Island and Its People," Polynesian Society, Journal, Vol. 11 and Vol. 12, 1902-03.
- _____. "Notes on the Mangareva or Gambier Group of Islands, Eastern Polynesia," Polynesian Society, Journal, Vol. 27, 1918.
- Soljak, P. L. New Zealand. Pacific Pioneer. New York: The Macmillan Co., 1946.
- Stair, J. B. "Samoa; Whence Peopled," Polynesian Society, Journal, Vol. 5, 1896.
- _____. Old Samoa. Oxford, London: Horace Hart, Printer to the University, 1897.
- Strayer, J. R. (ed). The Interpretation of History. New York: Peter Smith, 1950.
- Stumpf, Florence. and Cozens, F. W. "Some Aspects of the Role of Games, Sports and Recreational Activities in the Culture of Modern Primitive Peoples. The Maoris," Research Quarterly, Vol. 18, 1947.
- _____. "Some Aspects of the Role of Games, Sports and Recreational Activities in the Culture of Modern Primitive Peoples. The Fijians," Research Quarterly, Vol. 20, 1949.

- Suggs, Robert C. The Island Civilizations of Polynesia. New York: Mentor Books, 1960.
- _____. The Hidden Worlds of Polynesia. Toronto, Ontario: Mentor Books, 1965.
- Sutton-Smith, Brian. The Games of New Zealand Children. Berkeley: University of California Press, 1959.
- _____. "A Formal Analysis of Game Meaning," Western Folklore, Vol. 18, 1959.
- Sutton-Smith, Brian. and Roberts, John M. "Game Involvement in Adults," Journal of Social Psychology, Vol. 60, 1963.
- _____. "Rubrics of Competitive Behaviour," The Journal of Genetic Psychology, Vol. 105, 1964.
- Tennent, H. C. "Samoa: Old and New," Hawaiian Historical Society, Annual Report, Vol. 35, 1926.
- Thompson, Basil. The Fijians: A Study of the Decay of Customs. London: William Heinemann, 1908.
- Thompson, L. M. Fijian Frontier. New York: American Council, Institute of Pacific Relations, 1940.
- _____. "Southern Lau, An Ethnography," Bishop Museum, Bulletins, Vol. 162, 1940.
- Tonganivalu, D. "Fiji and the Fijians During the 50 Years Now Ending, 1874-1924," Fijian Society, Transactions, 1924.
- Toynbee, Arnold T. A Study of History. New York: Reconsiderations Oxford University Press, 1964.
- Tregear, Edward. The Maori Race. Victoria Avenue, London: A. D. Willis, Printer and Publisher, 1904.
- Turner, F. M. "Sport in Samoan Craft," Outing, October, 1894.
- Turner, G. Rev. Nineteen Years in Polynesia. London: John Snow, 1841.
- _____. Samoa a Hundred Years Ago and Long Before. London: John Snow, 1884.
- Tylor, E. B. "Remarks on the Distribution of Games," Journal of Anthropological Institute, Vol. 9, 1880.

- Van Dalen, D. B. "A Differential Analysis of the Play of Adolescent Boys," Journal of Educational Research, Vol. 41, 1947.
- Van Dalen, D.B., Mitchell, E. D. and Bennett, B. L. A World History of Physical Education. Englewood Cliffs: Prentice Hall, 1961.
- Westervelt, W. D. "Old Hawaiian Games," Mid-Pacific Magazine, October, 1916.
- Whitcombe, J. D. "Notes on Tongan Ethnology," Bishop Museum, Occasional Papers, Vol. 9, 1930.
- Whitmee, S. J. "The Ethnology of Polynesia," Royal Anthropological Institute, Journal, Vol. 8, 1879.
- Wilkes, C. Narrative of the U.S. Exploring Expedition During the Years 1833-1842. Philadelphia: Vol. IV, 1845.
- Williams, T. and Calvert, J. Fiji and the Fijians. Vols. 1-2, New York: D. Appleton & Co., 1858.
- Winick, Charles. Dictionary of Anthropology. Totowa, New Jersey: Littlefield, Adams and Co., 1966.
- Withington, Antoinette. The Golden Cloak. Honolulu, Hawaii: Hawaiian Book Press, 1953.

Appendix A.

Figure 80. Map showing political distribution of Pacific Islands.



APPENDIX B

ILLUSTRATIONS AND THEIR SOURCES

FIGURE	SOURCE
1.	Sir Peter H, Buck, <u>The Coming of the Maori</u> (Wellington: Whitcombe and Tombs Ltd., 1949), p.200.
2.	<u>Ibid.</u> , p.202.
3.	Stewart Culin. "Hawaiian Games," <u>American Anthropologist</u> , Vol.1, April, 1899., p.230.
4.	Barnaby Conrad. <u>Tahiti</u> (New York: The Viking Press, 1961), p.50.
5.	B.P. Bishop Museum, Catalogue number 23306, drawing by James Webber, January 28, 1770.
6.	<u>Ibid.</u> , #12088.
7.	<u>Ibid.</u> , #3327.
8.	<u>Ibid.</u> , #8562.
9.	<u>Ibid.</u> , #3508.
10.	Culin, <u>op.cit.</u> , p.244.
11.	Elsdon Best, <u>The Maori As He Was</u> (Wellington: R.E. Owen, Government Printer, 1952), p.148.
12.	Bishop, <u>op.cit.</u> , #1463.
13.	Culin, <u>op.cit.</u> , p.244.
14.	<u>Ibid.</u>
15.	<u>Ibid.</u>
16.	Bishop, <u>op.cit.</u> , #16513.
17.	Bengt Danielsson. <u>The Happy Island</u> (London: George Allen and Unwin Ltd, 1952), p.128.
18.	Bishop, <u>op.cit.</u> , #28855.
19.	Culin, <u>op.cit.</u> , p.214.

FIGURE	SOURCE
20.	<u>Ibid.</u>
21.	Bishop, <u>op.cit.</u> , #13459.
22.	Best, <u>op.cit.</u> , p.152.
23.	Buck, <u>op.cit.</u> , p.249.
24.	Best, <u>op.cit.</u> , p.154.
25.	Buck, <u>op.cit.</u> , p.247.
26.	Best, <u>op.cit.</u> , p.153.
27.	Culin, <u>op.cit.</u> , p.221.
28.	<u>Ibid.</u>
29.	Bishop, <u>op.cit.</u> , #17616.
30.	Felix Speiser. <u>Two Years with the Natives in the Western Pacific</u> (London: Mills and Boon, Ltd., 1913), p.278.
31.	Culin, <u>op.cit.</u> , p.222.
32.	Bishop, <u>op.cit.</u> , #15923.
33.	<u>Ibid.</u>
34.	Conrad, <u>op.cit.</u> , p.49.
35.	A.B. Brewster, <u>The Hill Tribes of Fiji</u> (London: Seeley, Service and Co.Ltd, 1922)
36.	D.S. Davidson. "The Pacific and Circum-Pacific Appearances of the Dart - Game," <u>The Polynesian Society Journal</u> , 1931 p.102.
37.	L.P. Churchill. "Sports of the Samoans" <u>Outing</u> , March, 1899, p.563.
38.	H.D. Skinner "Bowling - Discs from New Zealand and Other Parts of Polynesia," <u>Polynesian Society Journal</u> , vol.55. 1946, p.253.
39.	<u>Ibid.</u> , p.249.
40.	Bishop, <u>op.cit.</u> , #16620.
41.	Skinner, <u>op.cit.</u> , p.252.

FIGURE	SOURCE
42.	Culin, <u>op.cit.</u> , p.237.
43.	Sir Peter H. Buck, "Arts and Crafts of Hawaii" Bishop Museum Special Bulletin 45, 1957, p.372.
44.	Bishop, <u>op.cit.</u> , #BM2562.
45.	Culin, <u>op.cit.</u> , p.239.
46.	Churchill, <u>op.cit.</u> , p.564.
47.	E. Hadfield. <u>Among the Natives of the Loyalty Group</u> (London: Macmillan and Co. Ltd., 1920), p.77.
48.	Mary and Henry Larsen. <u>The Golden Cowrie</u> . (London: Oliver and Boyd, 1961), p.84.
49.	Hadfield, <u>op.cit.</u> , p.130.
50.	<u>Ibid.</u> , p.129.
51.	Lyle A. Dickey. "String Figures from Hawaii," <u>Bishop Museum Bulletin</u> No.54, 1928, p.18.
52.	Culin, <u>op.cit.</u> , 222.
53.	Culin, <u>op.cit.</u> , 223.
54.	<u>Ibid.</u> , p.224.
55.	Bishop, <u>op.cit.</u> , #18392.
56.	Best, <u>op.cit.</u> , p.143.
57.	Culin, <u>op.cit.</u> , p.221.
58.	<u>Ibid.</u> , p.242.
59.	William Ellis, <u>Polynesian Researches</u> Vol.I (London: Fisher, Son, and Jackson, 1830), p.309.
60.	James Cowan, <u>The Maori Yesterday and To-day</u> (Auckland: Whitcombe and Tombs Limited, 1930), p.208.
61.	Best, <u>op.cit.</u> , p.142.
62.	William R. Castle Jr. <u>Hawaii Past and Present</u> (New York: Dodd, Mead and Company, 1915), p.27.
63.	Ellis, <u>op.cit.</u> , Vol.IV, p.369.

FIGURE	SOURCE
64.	Bishop, <u>op.cit.</u> , #28856.
65.	Culin, <u>op.cit.</u> , p.213.
66.	Best, <u>op.cit.</u> , p.156.
67.	Buck, <u>op.cit.</u> , p.249.
68.	Bishop, <u>op.cit.</u> , #12489.
69.	Best, <u>op.cit.</u> , p.149.
70.	<u>Ibid.</u> , p.150.
71.	<u>Ibid.</u> , p.151.
72.	Buck, <u>op.cit.</u> , p.249.
73.	Culin, <u>op.cit.</u> , p.228.
74.	<u>Ibid.</u> , p.221.
75.	<u>Ibid.</u> , p.220.
76.	Bishop, <u>op.cit.</u> , \$952.
77.	<u>Ibid.</u> , #8560.
78.	Best, <u>op.cit.</u> , p.165.
79.	Culin, <u>op.cit.</u> , p.220.

B29883